



**Department of
Transportation**

I-81 VIADUCT PROJECT - PHASE 1, CONTRACT 1

PIN 3501.90, Contract D900054

DB CONTRACT DOCUMENTS REQUEST FOR PROPOSALS

PART 7

ENGINEERING DATA (PART 4 OF 5)

Draft May 17, 2022

ENGINEERING DATA

TABLE OF CONTENTS


ASBESTOS SURVEY REPORTS (CONTINUED)

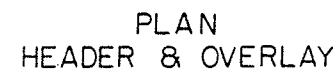
Asbestos Survey Reports (Continued)

Interstate Rte. 571 Extension (I-481)
Collamer Interchange to Northern Blvd
Onondaga County

Note: For details of Railing Anchorage See DWG. No. 17



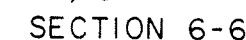
	STATE OF NEW YORK
	DEPARTMENT OF TRANSPORTATION
DIVISION OF DESIGN AND CONSTRUCTION	
SOUTHBOUND I-481 OVER N.Y.S. THRUWAY	
SOUTH ABUTMENT PROPOSED (2 OF 2)	



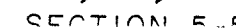
SECTION 2-2



SECTION 7-7



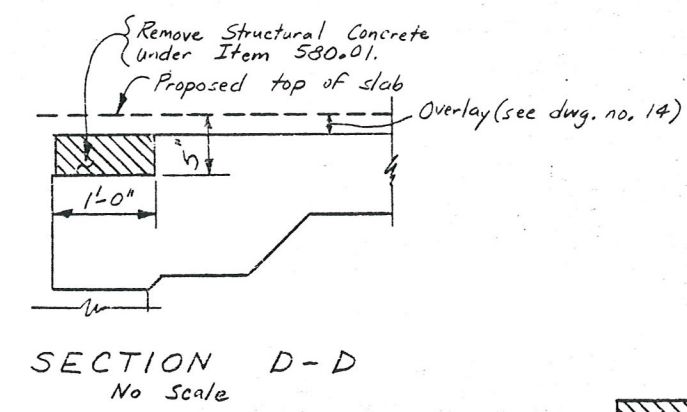
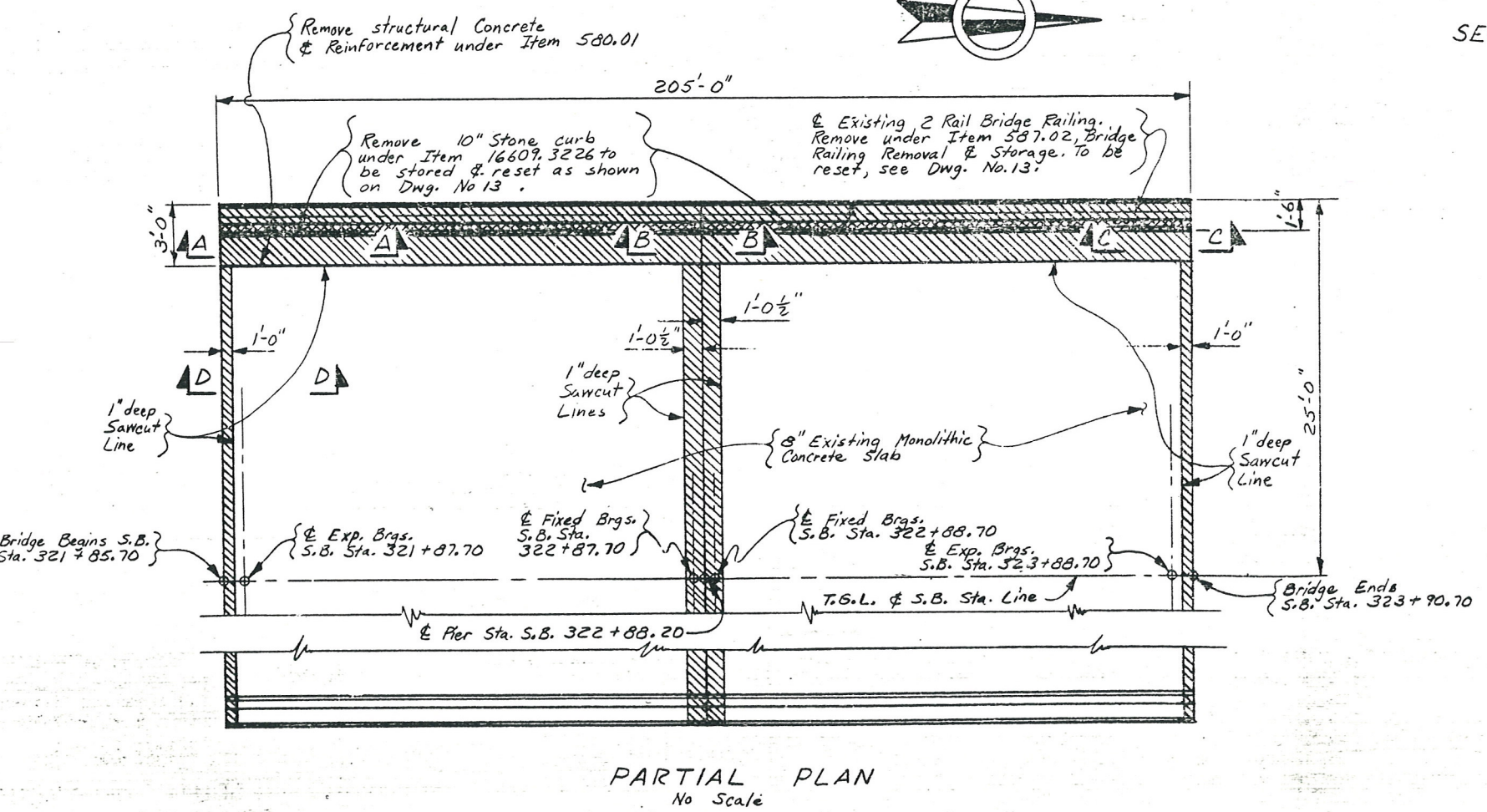
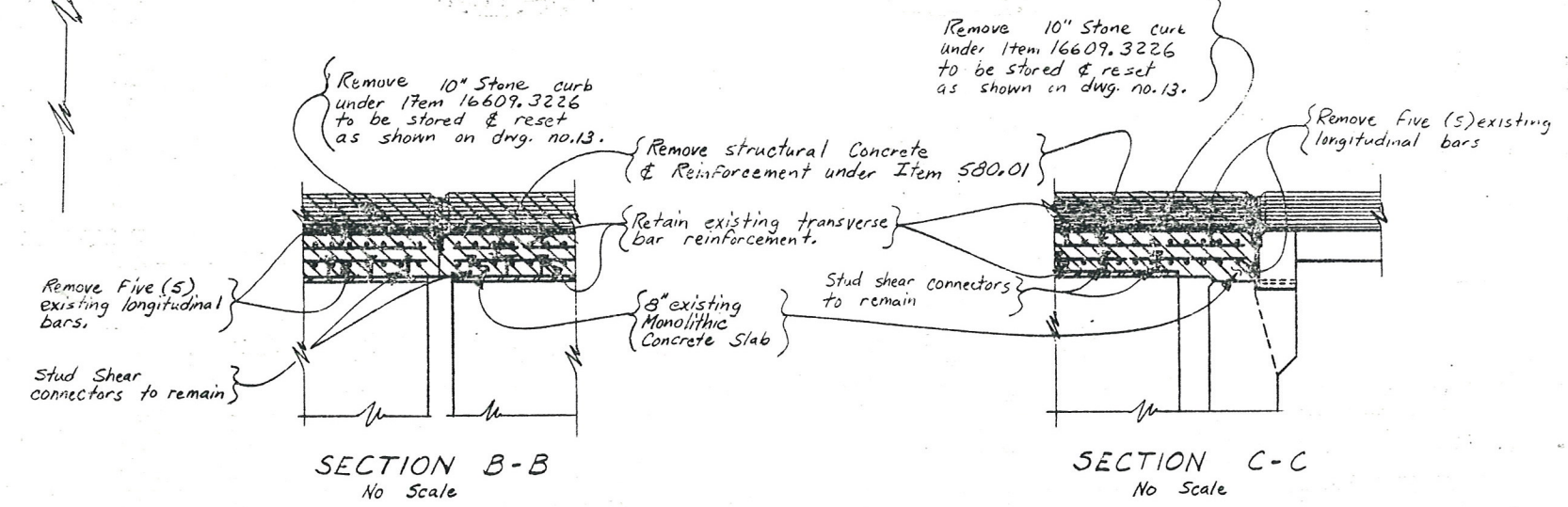
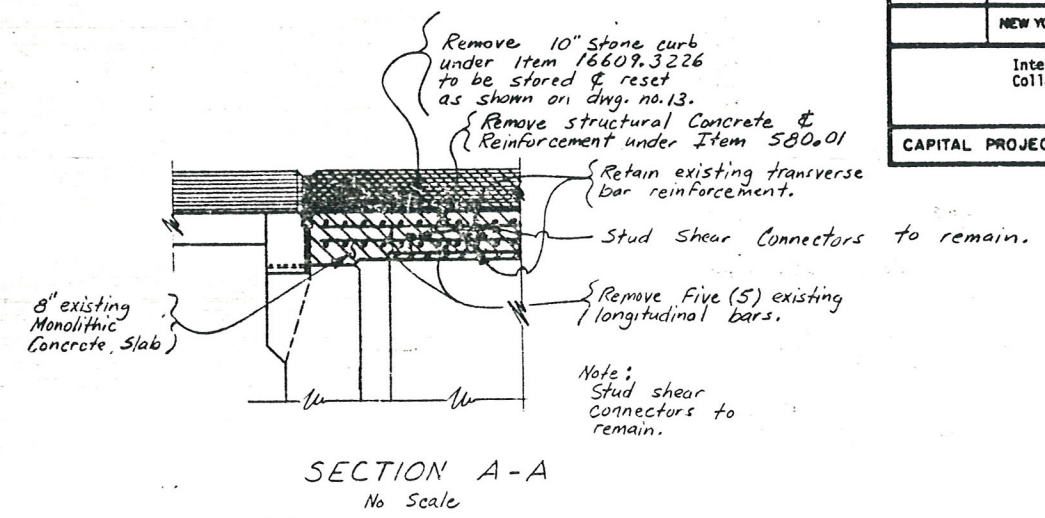
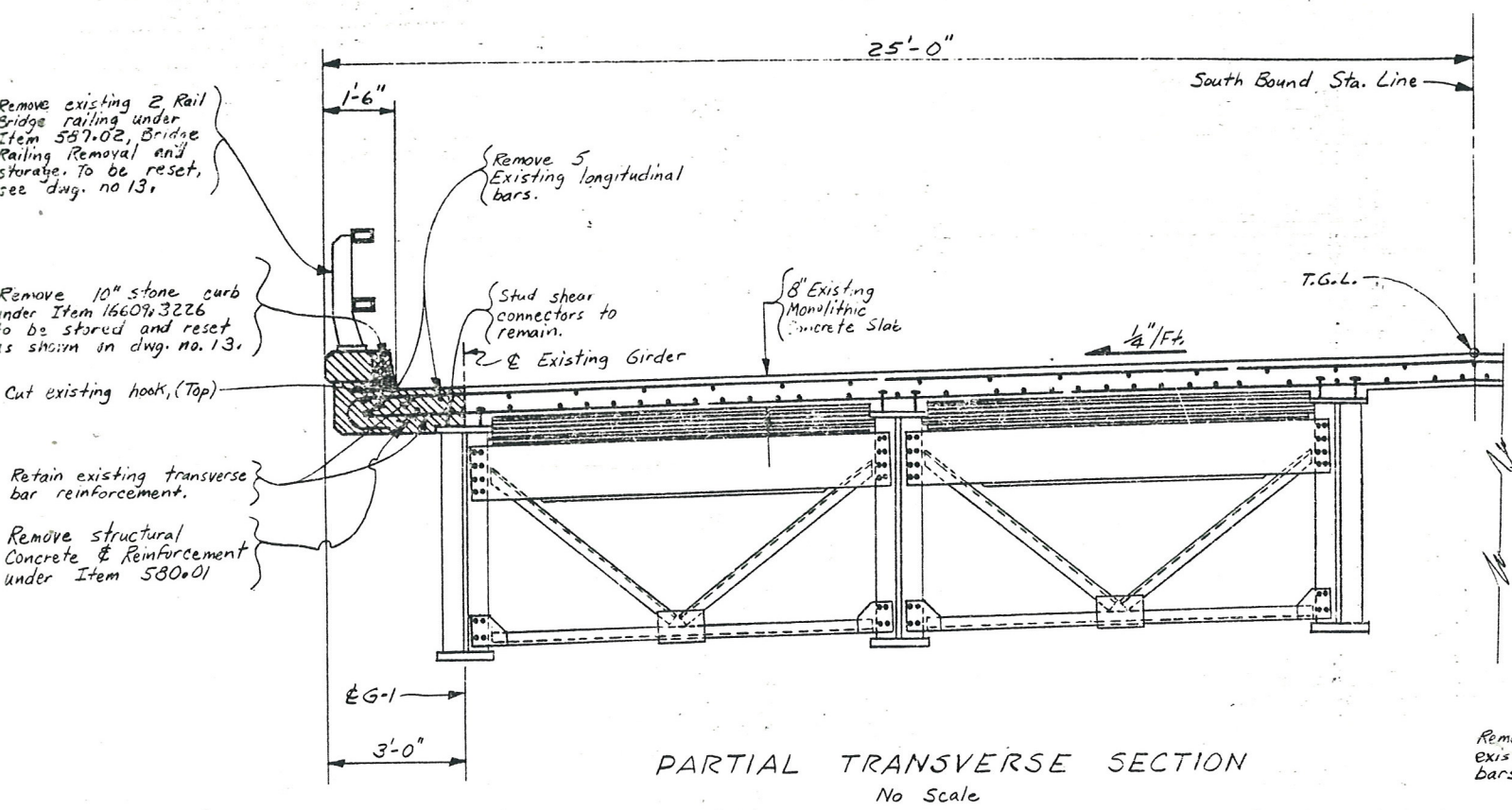
SECTION 4-4



Item 15580.4401 Drilling
and Grouting Reinf. Bars
or Anchor Bolts, See Note "A"

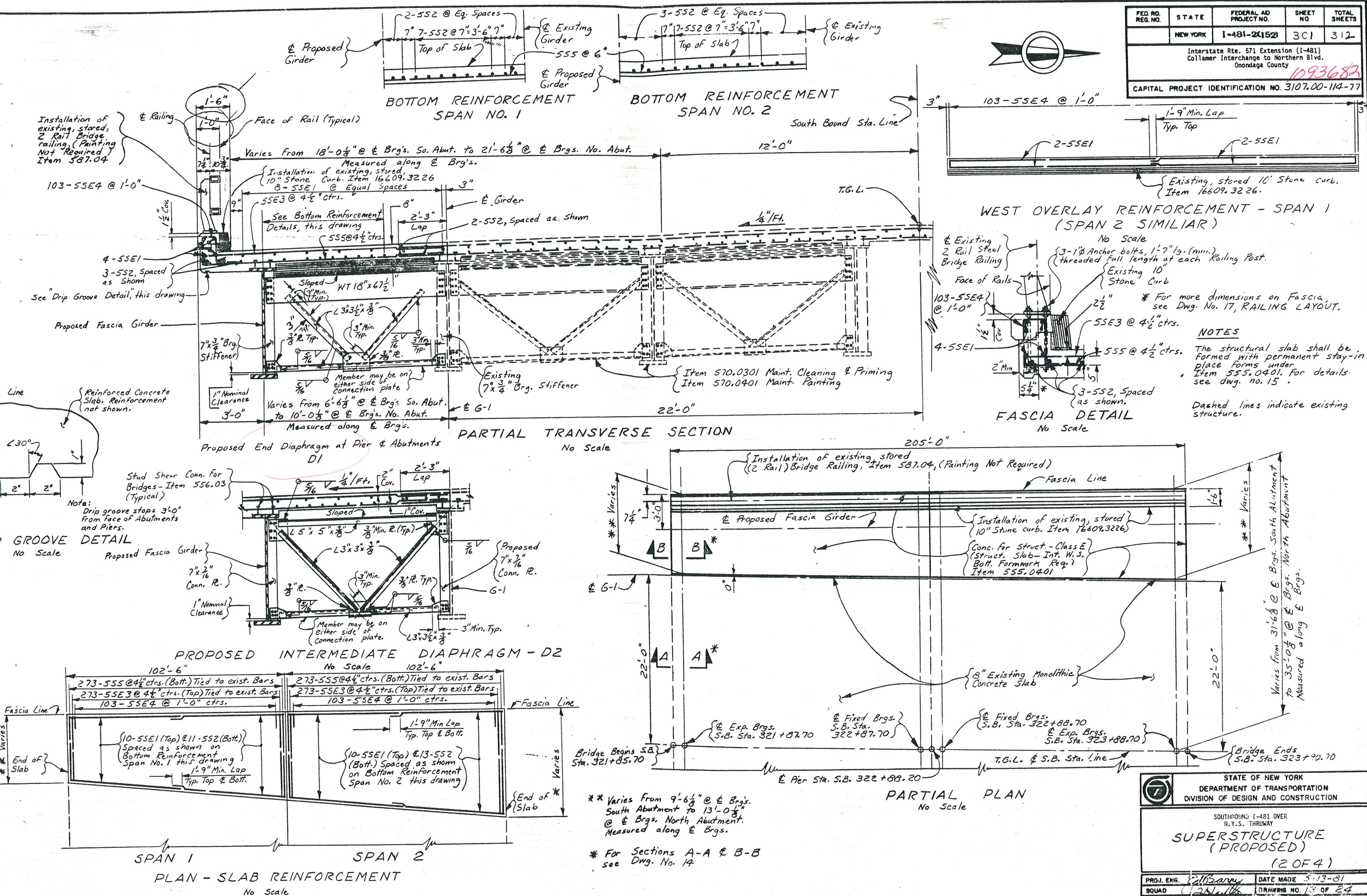
FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
	NEW YORK	I-481-2(152)	300	312
Interstate Rte. 571 Extension (I-481) Collamer Interchange to Northern Blvd. Onondaga County				
CAPITAL PROJECT IDENTIFICATION NO. 3107.00-114-77				

1093682

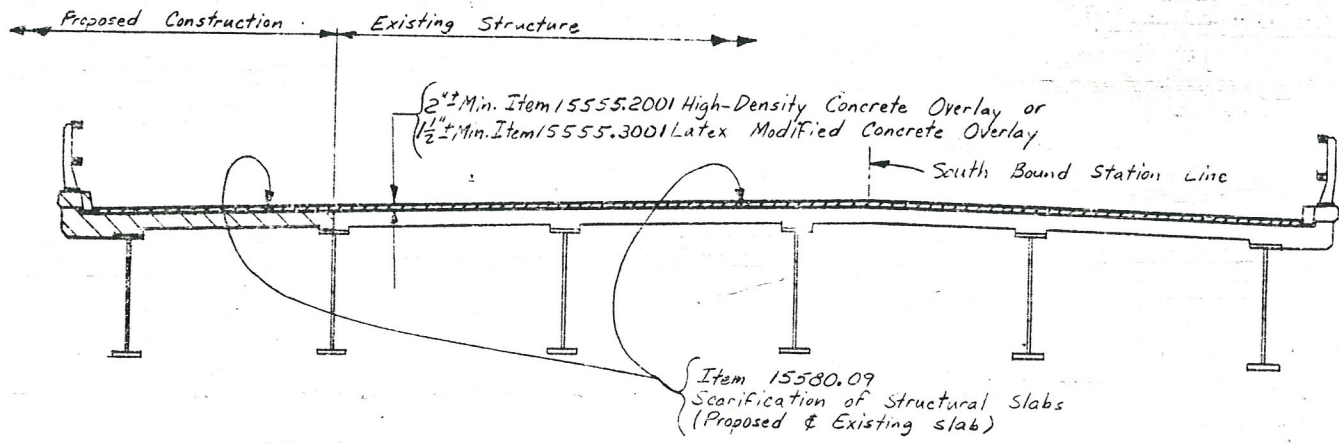


Denotes Limits For Removal Items

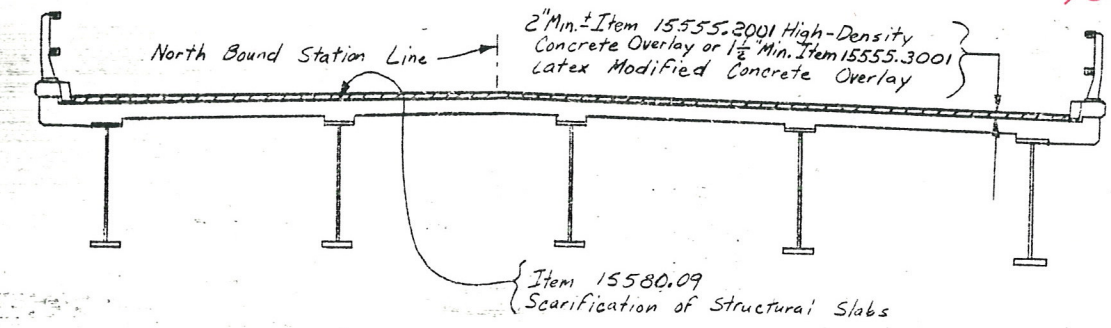
STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION DIVISION OF DESIGN AND CONSTRUCTION	
SOUTHBOUND I-481 OVER N.Y.S. THRUWAY	
SUPERSTRUCTURE (REMOVAL)	
(1 OF 4)	
PROJ. ENG. <i>Ed Barry</i>	DATE MADE 11-13-80
DRAWN <i>J. H. HANE</i>	DRAWING NO. 12 OF 24



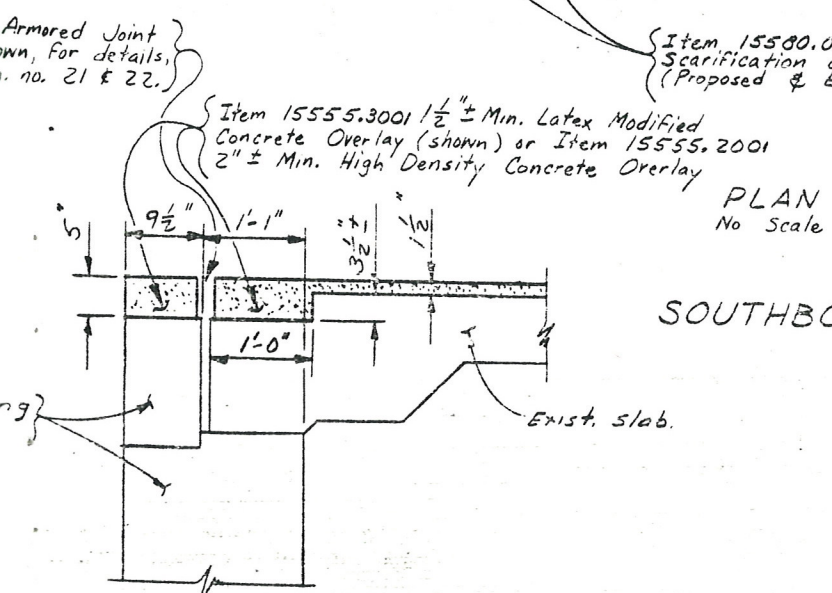
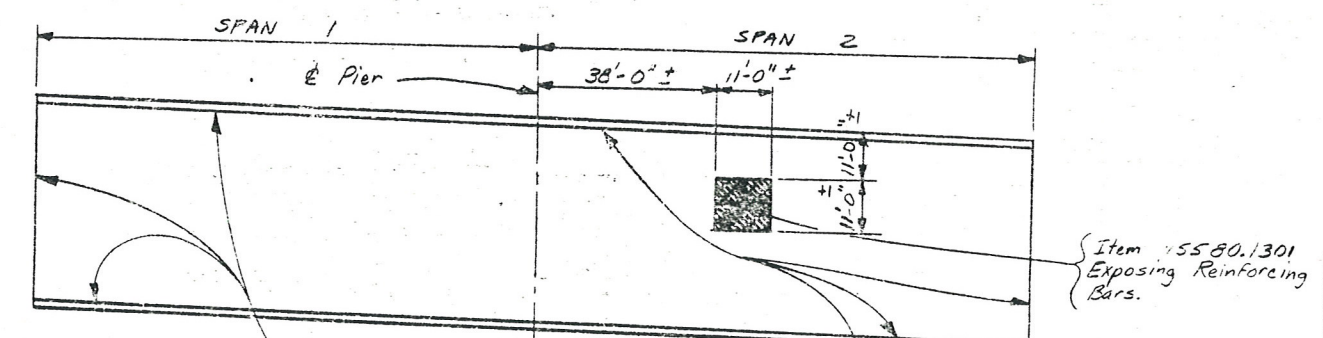
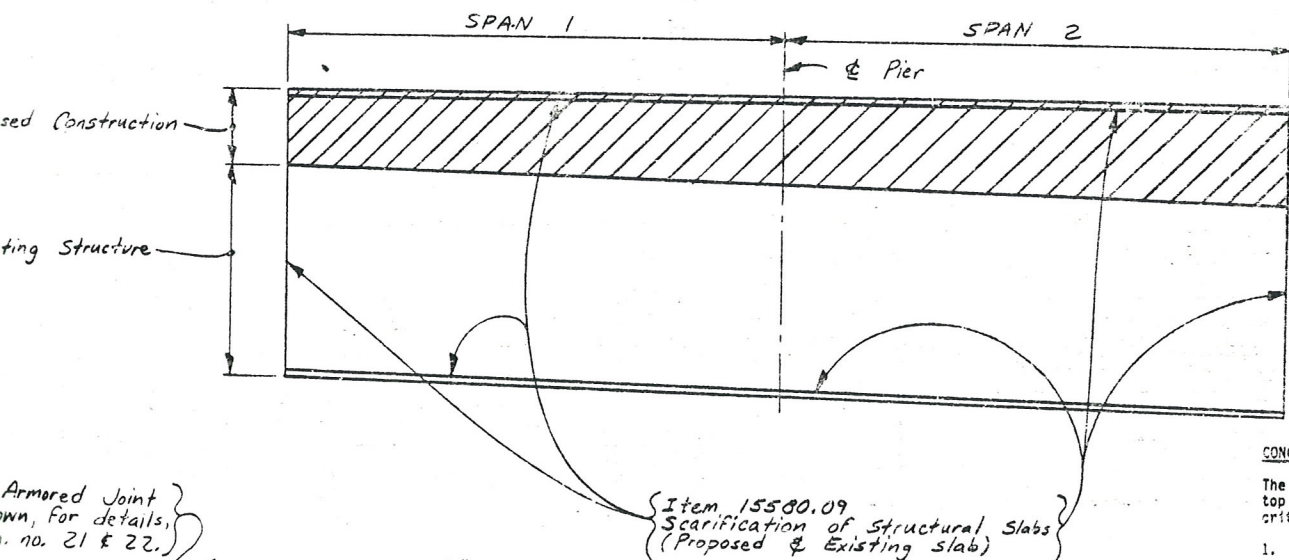
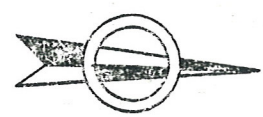
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	NEW YORK	I-481-2(152)	302	312
Interstate Rte. 571 Extension (I-481) Collamer Interchange to Northern Blvd. Onondaga County				
CAPITAL PROJECT IDENTIFICATION NO. 3107.00-114-77				



TRANSVERSE SECTION
No Scale



TRANSVERSE SECTION
No Scale



SECTION A-A*
No Scale

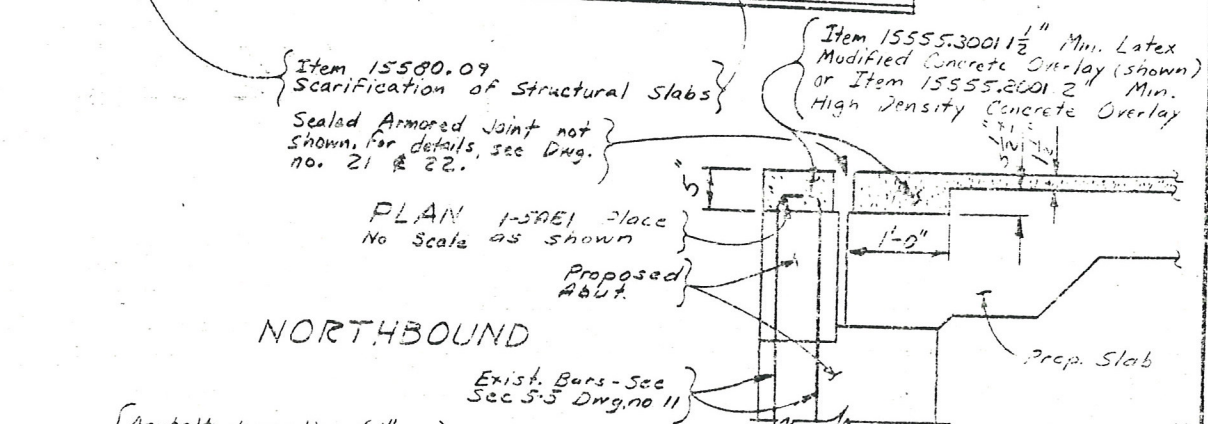
CONCRETE OVERLAY NOTES

The finished overlay profiles for these structures are based on the existing top reinforcing bar cover (shown elsewhere in the plans) using the following criteria:

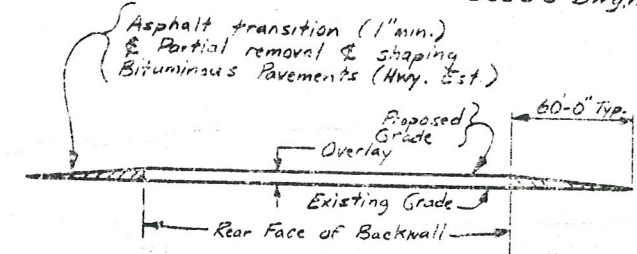
1. The minimum total cover (cover remaining over the reinforcing bars after the concrete removal (if any) plus the thickness of the new overlay material) shall be 2 1/4 inches.
2. The minimum thickness of the High Density Concrete Overlay shall be 2 inches.
3. If the Contractor has elected to bid on Item 1555.3001 Latex Modified Concrete Overlay, then the Contractor may submit a proposed finished profile to the Regional Director for approval. The proposed finished profile shall be submitted to the Regional Director at least two weeks before placement of the overlay and shall be based on the following criteria:
 1. The minimum total cover (cover remaining over the reinforcing bars after the removal plus the thickness of the new overlay material) shall be 2 1/4 inches.
 2. The minimum thickness of the Latex Modified Concrete Overlay shall be 1 1/2 inches.
 3. The transition lengths between the existing profile and proposed finished profile shall be of the same lengths as shown on the plans.
 4. The Contractor's proposal may include additional grade transitions subject to the following:
 - a. The minimum length between grade transitions shall be 60 feet.
 - b. The slope of the grade transition shall not differ from the slope of the adjacent sections by more than .005% at the completion of the work.
 - c. The slope changes do not create drainage problems on the bridge deck.

No overlay material shall be placed until the Regional Director has approved a satisfactory proposed finished profile.

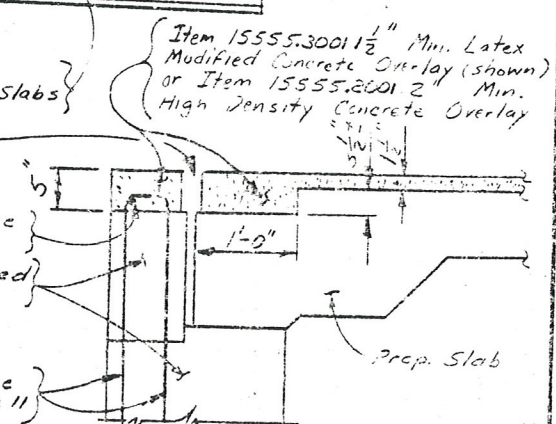
* For location of Sections A-A & B-B
See Drawing No. 13.



PLAN 1-5851 Place
No Scale as shown



LONGITUDINAL SECTION
No Scale



SECTION B-B*
No Scale

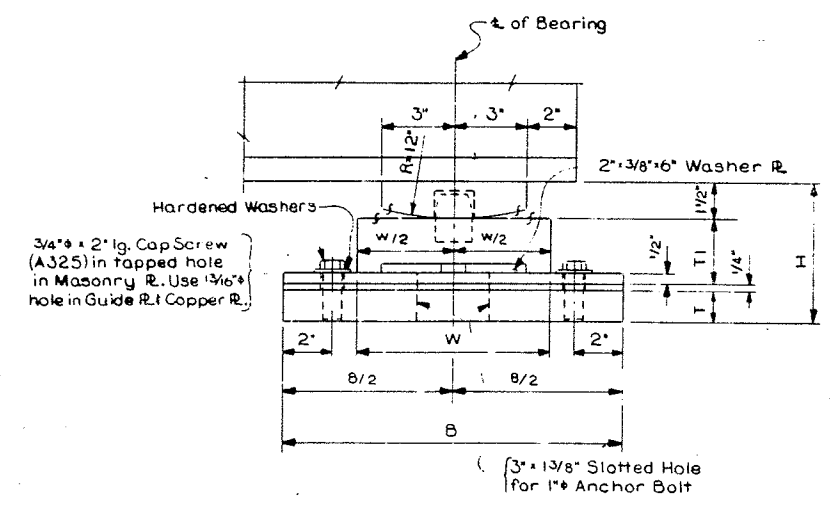
STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION DIVISION OF DESIGN AND CONSTRUCTION	
RD 3 & 3B I-481 OVER N.Y.S. THRUWAY	
SUPERSTRUCTURE CONCRETE OVERLAY (3 OF 4)	
PROJ. ENG. Ed Barry	DATE MADE 5-28-81
DESIGNER J. J. Harte	DRAWN NO. 14 OF 24

FED. RD. DIST. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
	NEW YORK	I-481-2(152)	304	312
Interstate Rte. 571 Extension (I-481) Collision Interchange to Northern Blvd. Oneida County				
CAPITAL PROJECT IDENTIFICATION NO.				

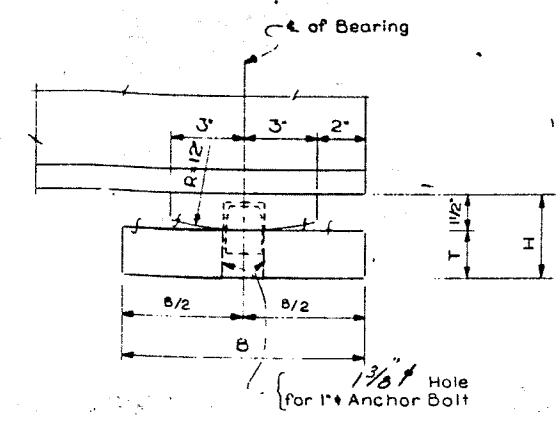
1093682

NOTE:

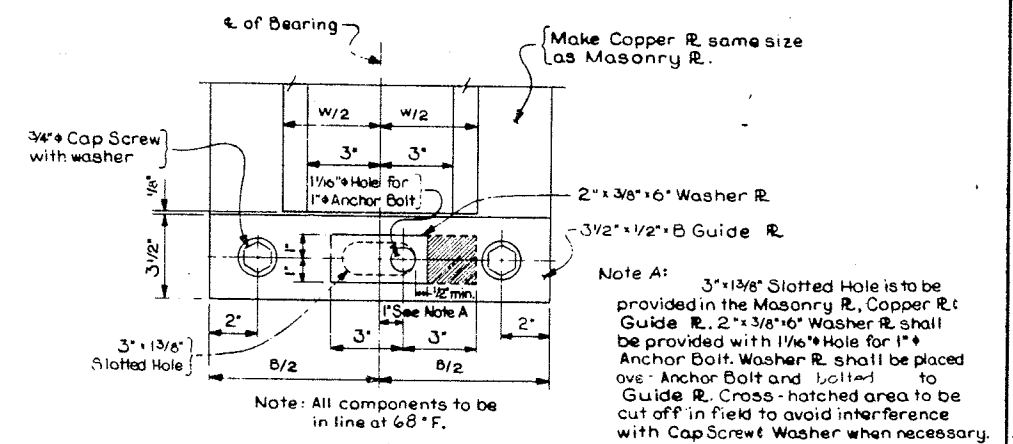
Machine-finished sliding surfaces in contact shall receive one coat of any multi-purpose automotive grease as soon as machining is complete. The Contractor shall maintain all protective coatings to prevent corrosion. All protective coatings applied in the shop shall be removed immediately prior to assembly of the members in the field. When the protective coating is removed, the members shall be thoroughly cleaned and then coated with multi-purpose automotive grease before assembly.



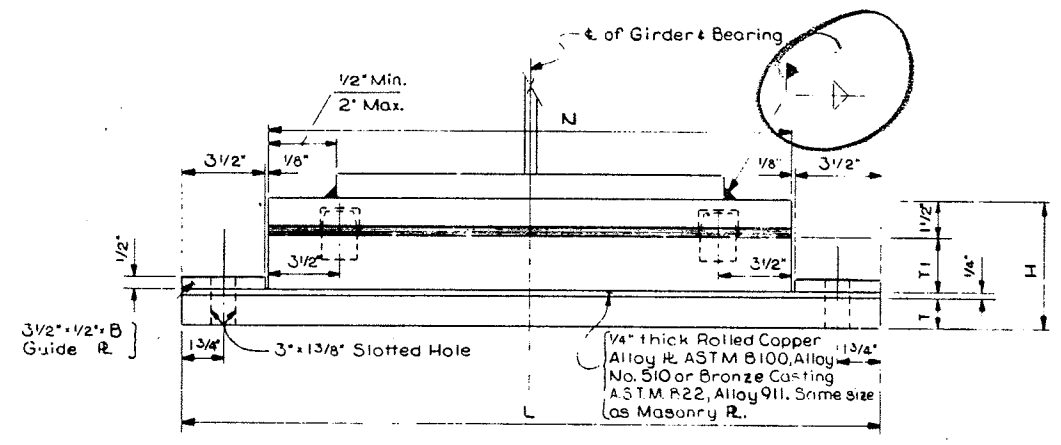
SIDE ELEVATION



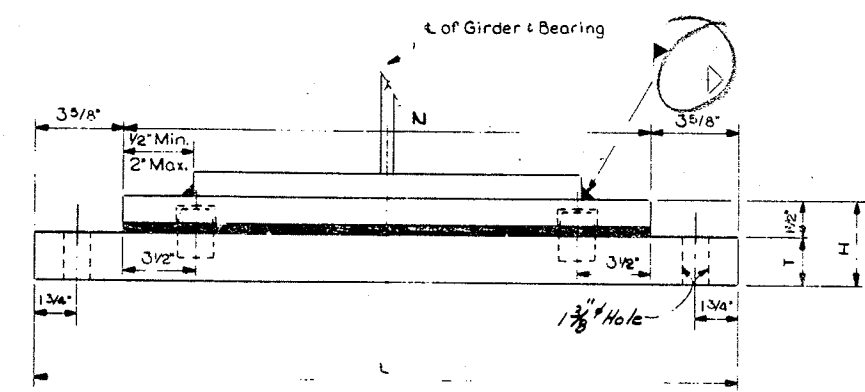
SIDE ELEVATION



WASHER PLATE ATTACHMENT DETAIL (EXP. BRG.)



END ELEVATION EXPANSION BEARING



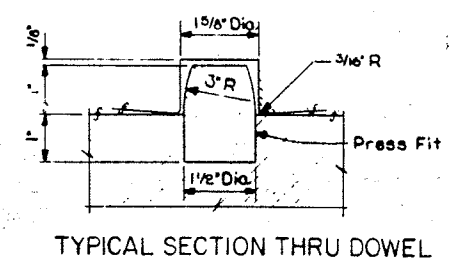
END ELEVATION FIXED BEARING

EXPANSION BEARING									
Type	Item No.	No. Req'd	B	L	T	W	N	T1	H
BE1	565.0301	2	12	21	1 1/4	8	13 3/4	2	5

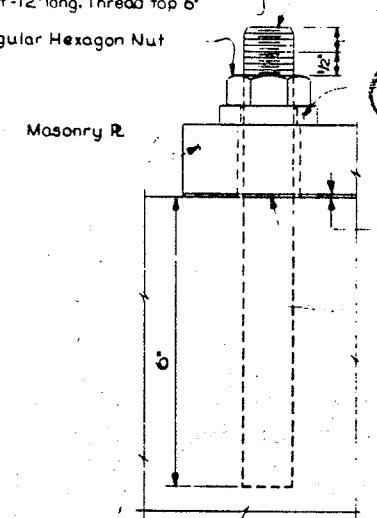
1" Roughened or Swaged Anchor Bolt - 12" long, Thread top 6"
Regular Hexagon Nut

FIXED BEARING							
Item No.	B	L	T	N	H	No. Req'd	Type
565.0401	6	21	1 1/2	13 3/4	3	2	BFI

This portion of bolt shall be removed after nut has been tightened to the satisfaction of the Engineer.
2" x 3/8" x 6" Washer R with 1/16" Hole



TYPICAL SECTION THRU DOWEL



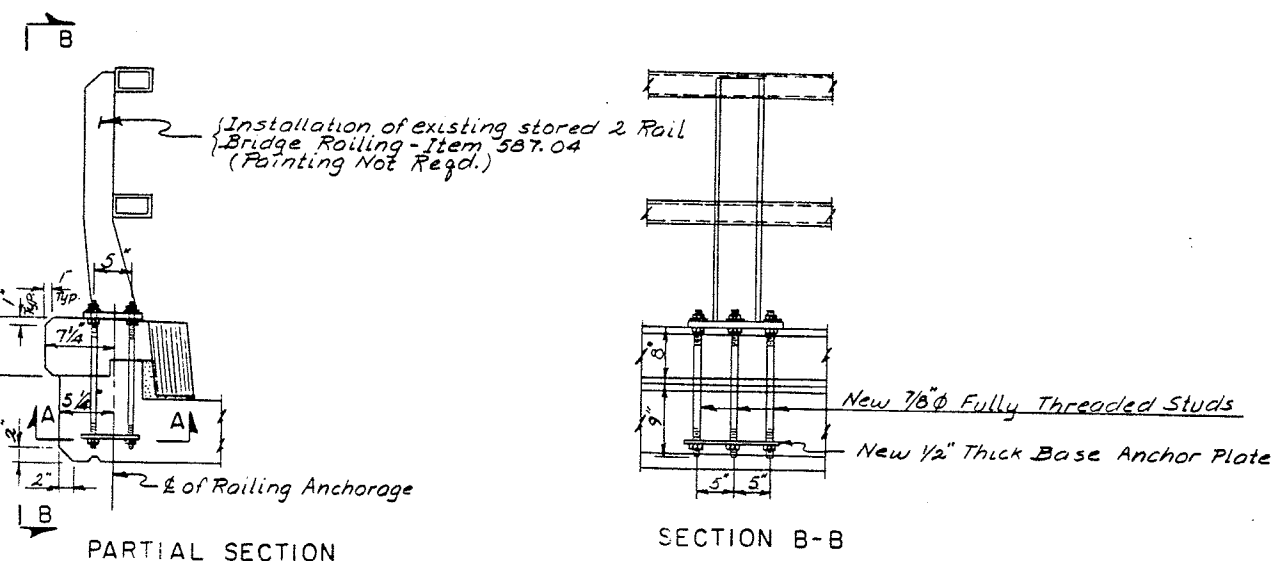
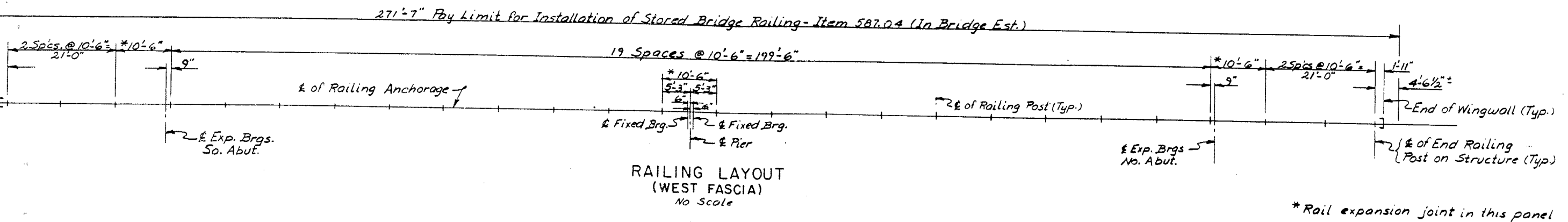
ANCHOR BOLT DETAIL

Rubber Impregnated Woven Cotton Fabric, 728-01 or Rubber Impregnated Random Fiber Pad 728-02
Bridge Seat
Note: Anchor Bolts and Nuts shall be galvanized in accordance with the requirements of Material Specification 719-01 Galvanized Coatings and Repair Methods.

Note: All material ASTM A36 except as noted when bearing is to be used on an unpainted bridge all material to be ASTM A588
3" x 1 3/8" slotted hole in masonry plate shall be filled as per specifications

DATE MADE: 10/1/81
PROJECT ENGINEER: [Signature]
CHECKED BY: [Signature]
DESIGNED BY: [Signature]
TYPED BY: [Signature]
DRAWN BY: [Signature]

FED. NO. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
	NEW YORK	1-481-2(152)	305	312
Interstate Rte. 571 Extension (I-481) Collamer Interchange to Northern Blvd. Onondaga County				
CAPITAL PROJECT IDENTIFICATION NO.				

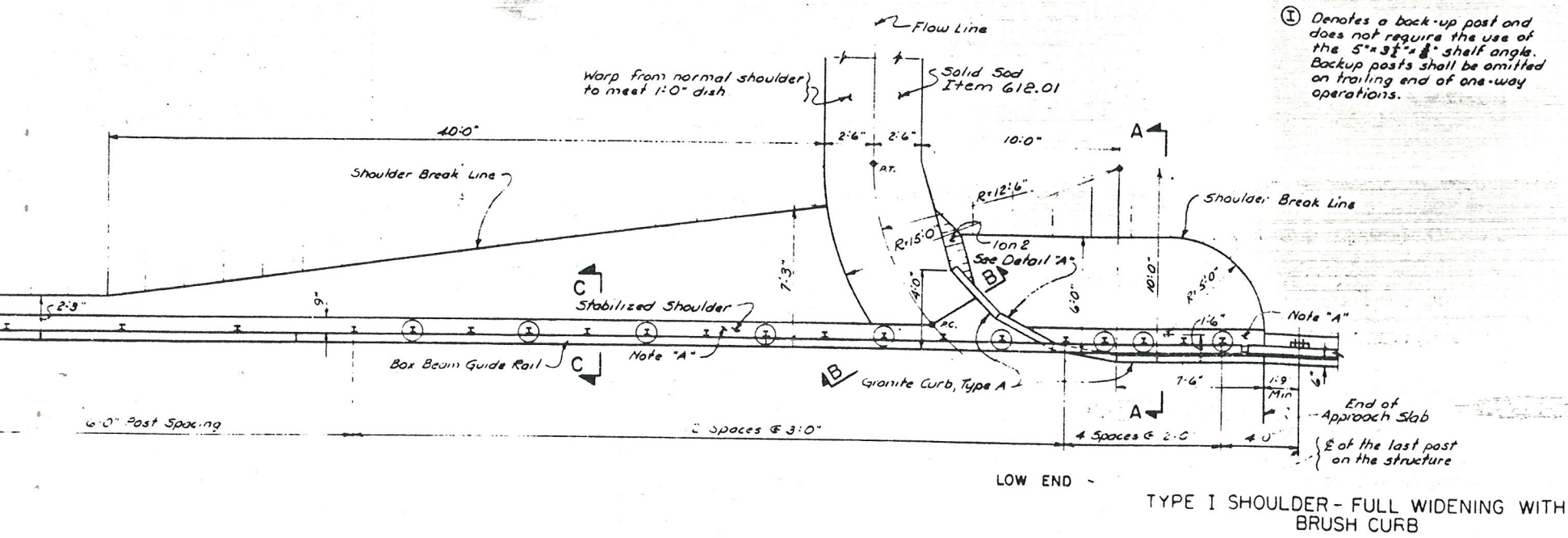


Note: Provide New Railing Anchorage
(Base Plate and Threaded Studs)
Paid Under-Item 587.04 (In Bridge Est.)

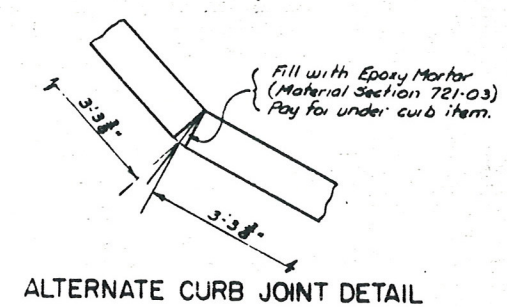
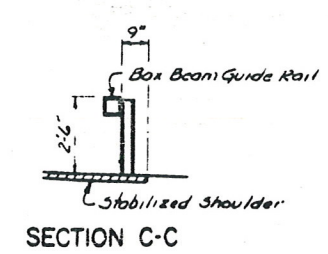
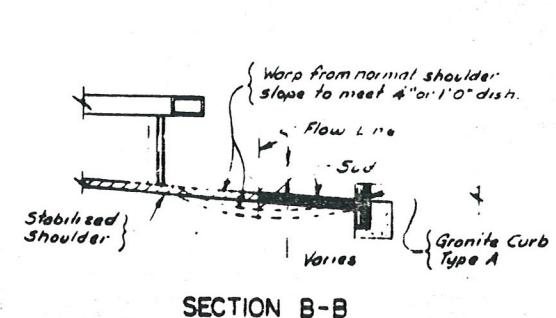
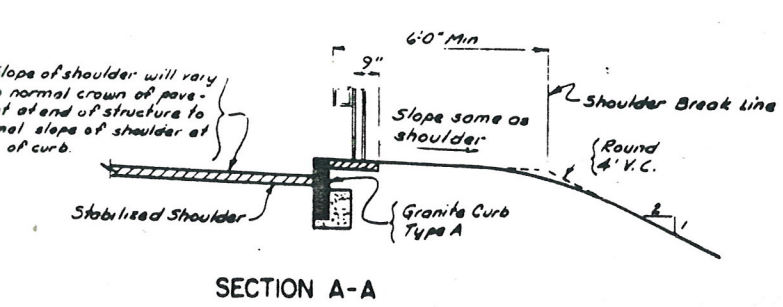
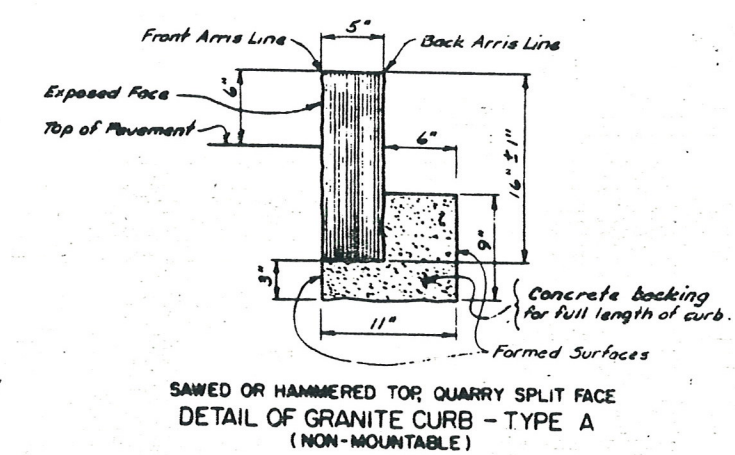
STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION DIVISION OF DESIGN AND CONSTRUCTION	
SOUTHBOUND I-481 OVER N.Y.S. THRUWAY	
RAILING LAYOUT	
PROJ. ENG. <i>E. D. [Signature]</i>	DATE MADE
SQUAD <i>102 [Signature]</i>	PREPARED BY <i>102 [Signature]</i>

FED. NO. RES. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
	NEW YORK	1-481-2(152)	306	312
Interstate Rte. 571 Extension (I-481) Collision Interchange to Northern Blvd. Onondaga County				
CAPITAL PROJECT IDENTIFICATION NO.				

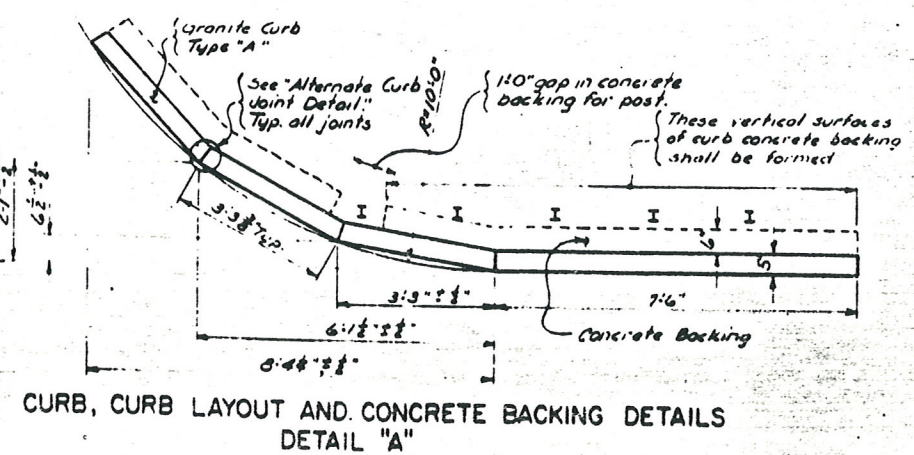
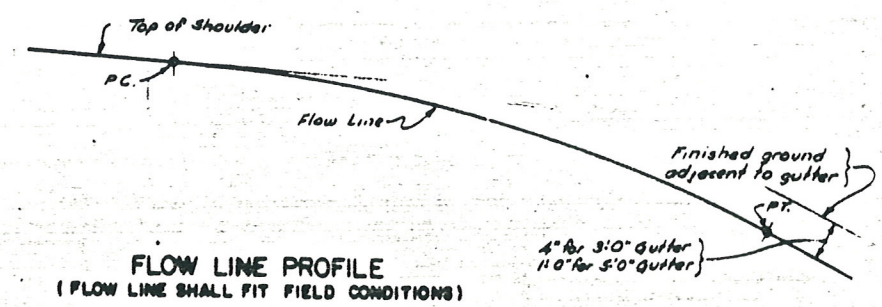
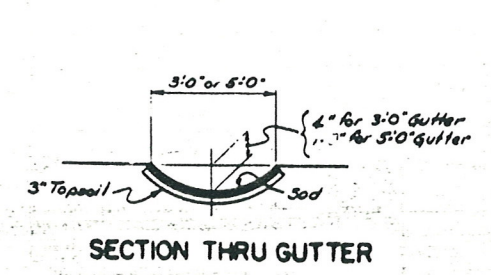
1093682



Note:
See Dwg - MD-2, for box
beam cable transition



Note "A" - Pave this area with the same material as in the stabilized shoulder. Payment will be made under stabilized shoulder item.



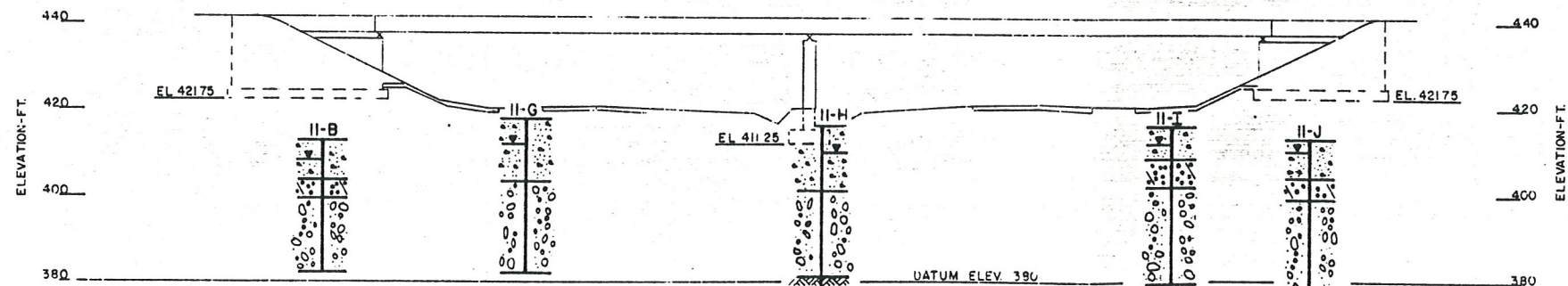
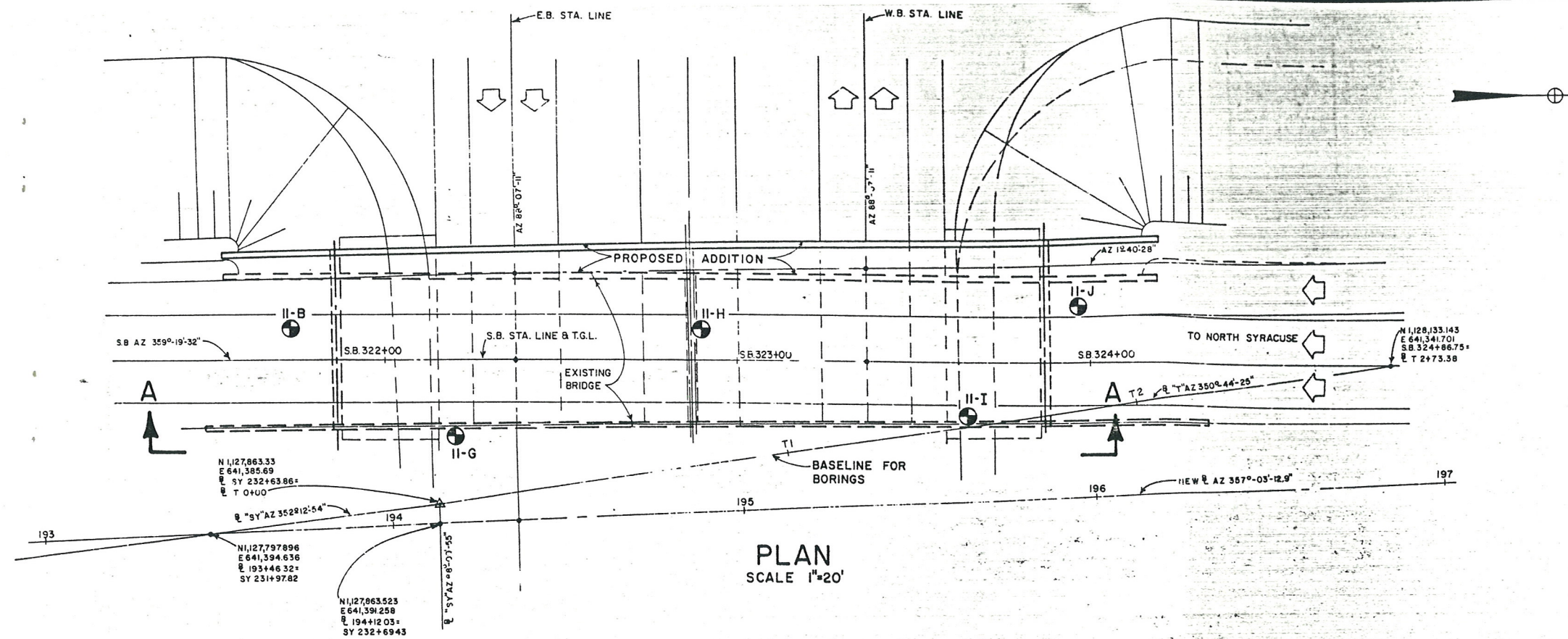
STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION DIVISION OF DESIGN AND CONSTRUCTION	
SOUTHBOUND I-481 OVER N.Y.S. THRUWAY	
SOD GUTTER DETAILS	
DESIGNED BY Ed. [Signature]	CHECKED BY [Signature]
DATE 10/9/24	PROJECT NO. 1093682

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
	NEW YORK	I-481-2(152)	308	312

Interstate Rte. 571 Extension (I-481)
Collamer Interchange to Northern Blvd.
Onondaga County

CAPITAL PROJECT IDENTIFICATION NUMBER: 3107.00

1093682



NOTE: THE BORING LOGS REVEALED TOPSOIL VARYING FROM 0" TO 18" AT THE TOP OF THE DRILL HOLES
THIS TOPSOIL WAS REMOVED IN THE AREA OF THE PIERS AND ABUTMENTS DURING
CONSTRUCTION

SECTION A-A
BORINGS PROJECTED PERPENDICULAR TO SECTION LINE
SCALE 1"=20'

REFERENCE PLANS

Preliminary Structure Plans
Used for Analysis were

Prepared By The Structures Design
and Construction Division

Scale Date
1"=20' SEPT. 3, 1980

Prepared By John D. Hagan
Reviewed By D. Hagan

Checked By D. Hagan

GENERAL NOTES

The subsurface explorations shown hereon were made between 11/20/61 to 12/7/61 by the Regional
Soils Section.
1) General soil and rock (where encountered) strata descriptions and indicated boundaries
are based on an engineering interpretation of all available subsurface information by the
Soil Mechanics Bureau and may not necessarily reflect the actual variation in subsurface
conditions between borings and samples. Detailed data and field interpretations of con-
ditions encountered in individual borings are shown on the subsurface exploration logs.
2) The observed water levels and/or conditions indicated on the subsurface profiles are as
recorded at the time of exploration. These water levels and/or conditions may vary con-
siderably, with time, according to the prevailing climate, rainfall or other factors and
are otherwise dependent on the duration of and methods used in the explorations program.
3) Sound engineering judgment was exercised in preparing the subsurface information
presented hereon. This information was prepared and is intended for State design and estimate
purposes only. Its presentation on the plans or elsewhere is for the purpose of providing
intended users with access to the same information available to the State. This subsurface
information interpretation is presented in good faith and is not intended as a substitute
for personal investigation, independent interpretations or judgment of the Contractor.
4) All structure details shown hereon are for illustrative purposes only and may not be
indicative of the final design conditions shown in the contract plans.
5) Footing elevations shown are as indicated at the time of this drawing's preparation.

LEGEND

The following tables summarize the descriptive information used on this profile

Density (Non Plastic Soils)

Very Loose
Loose
Medium Compact
Compact
Very Compact

Consistency (Plastic Soils)

Very Soft
Soft
Firm
Stiff
Hard

No. of blows per foot of penetration of 2 inch O D
(1-1/2 inch I D) sampler using a 300 lb drop
hammer, 18 inch fall

0-3
4-8
9-20
21-35
over 35

0-2
3-6
7-12
13-20
over 20

The system for describing soil materials shown on
this drawing is detailed in "Soil Description
Procedure" Official Issuance No. 7.41-5 STP 2/75
prepared by the New York State Department of
Transportation, Soil Mechanics Bureau.

SYMBOLS

DRILL HOLE

OBSERVED WATER LEVEL

Medium Compact Brown & Red Silty fine Sand
& Reddish Brown Silt, fine Gravelly

Compact to Very Compact Red Gravelly Silt, Sandy
& Red Gravelly Silt, Clayey (Glacial Till)
Loose Reddish Brown & Brown Sandy Silt

LEDGEROCK

APPROVED JUL 30 1980

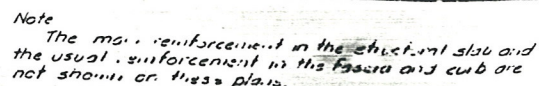
L. H. Hagan
DIRECTOR
SOIL MECHANICS BUREAU

REGION NO. 3
COUNTY ONONDAGA

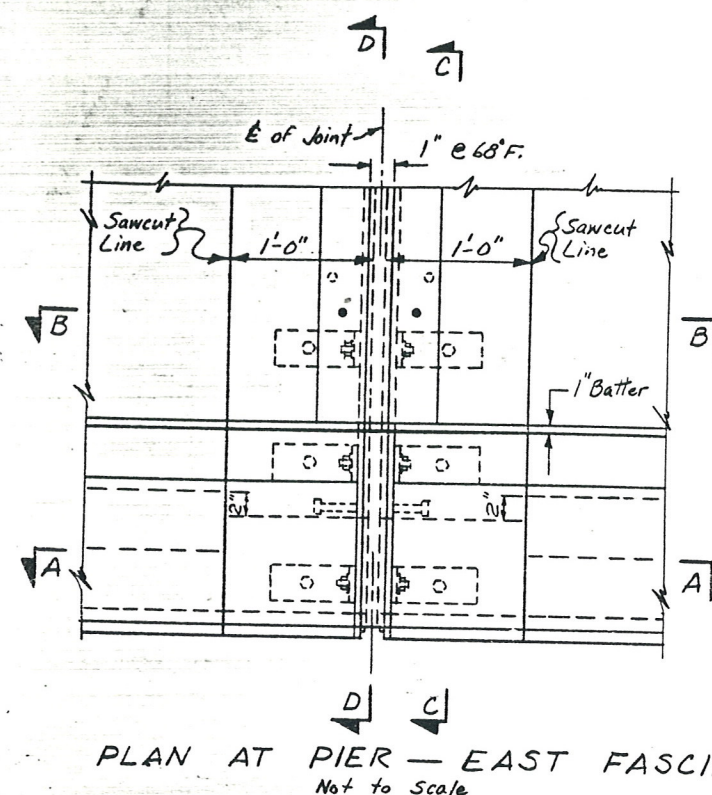
STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION
TECHNICAL SERVICES DIVISION

GENERAL SUBSURFACE PROFILE FOR
BRIDGE No. 4S I-481 OVER N.Y. STATE
THRUWAY

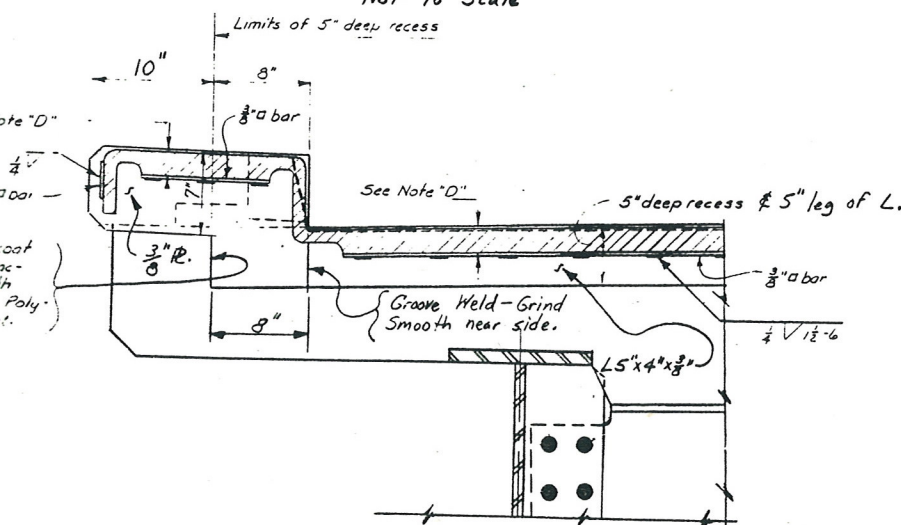
CAPITAL PROJECT IDENTIFICATION NO. 3107.00-114-2



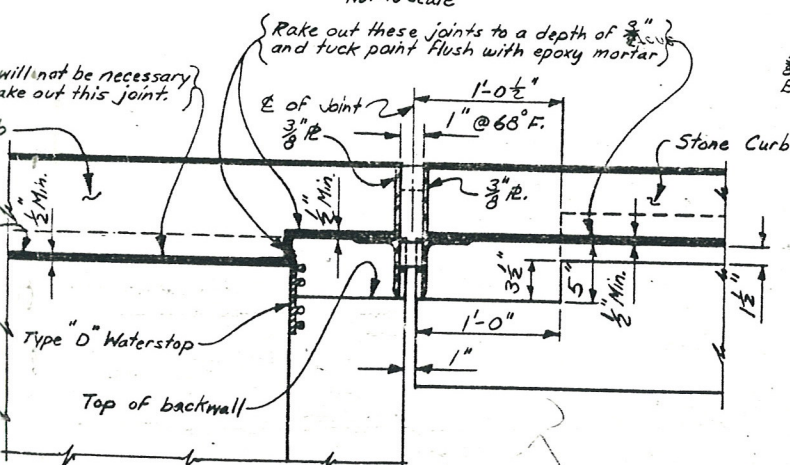
Note.
The width of seal before compression shall be 1 3/4".
For Section C-C, see Dwg. No. 21.



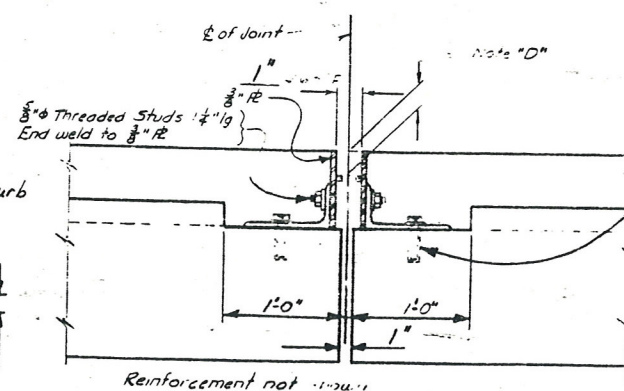
PLAN AT PIER - WEST FASCIA
Not to Scale



SECTION D-D
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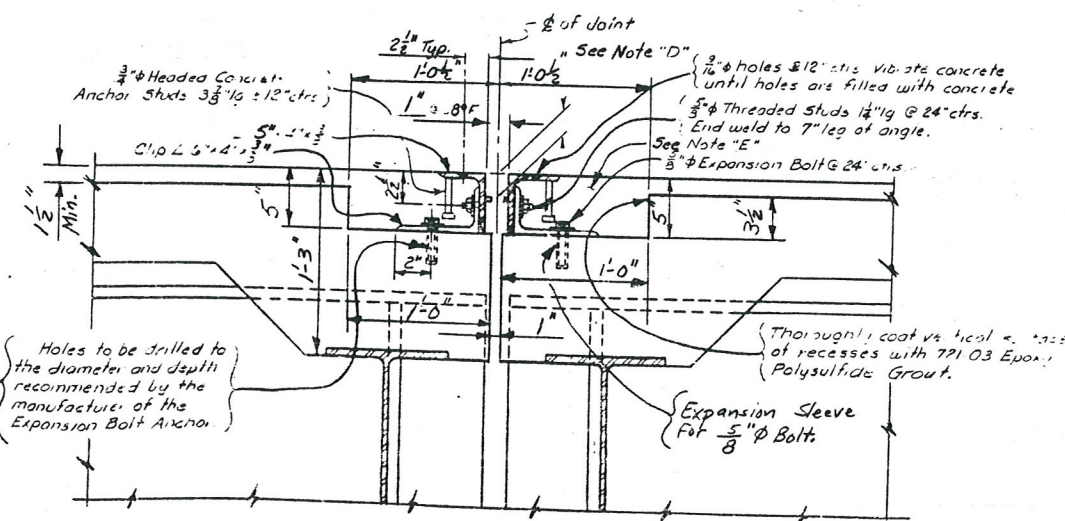


SECTION H-H
Not to Scale



SECTION A-A
Not to Scale


ARMORED JOINT SYSTEM			COMPRESSION SEAL		
TYPE	LOCATION	PAY ITEM	TYPE	NOM. WIDTH	DIM" A" @ 60
AI-FIXED	PIER	567.31	1	1 3/4"	1"



SECTION 8-B
Not to Scale

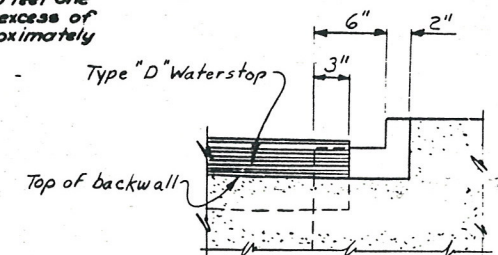
Note: It is desirable to have the armored joint with its preformed elastic joint seals assembled in the shop and delivered to the job site as set for installation. It is performed recess in the structural slab. In cases where the armored joint cannot be assembled in the shop, due to its excessive length causing shipping problems, the joint shall be sealed with the preformed elastic joint seals. Before the structure is open to traffic including construction traffic, and before deconfining operation when work is suspended during the winter.

Notes
For detail of Healed Concrete: Appendix St. 1
see Dwg 21

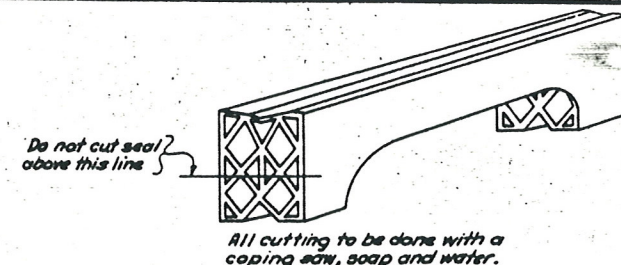
	STATE OF NEW YORK	
	DEPARTMENT OF TRANSPORTATION	
DIVISION OF CONSTRUCTION		
MB & SB 1-481 OVER N.Y.S. THRUWAY		
ARMORED JOINT SYSTEM WITH COMPRESSION SEAL (2 OF 2)		
PRJ. ENG. J. J. Barry	DATE MADE	

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
	NEW YORK	I-481-2C(152)	309	312
Interstate Rte. 571 Extension (I-481) Collamer Interchange to Northern Blvd. Onondaga County				
CAPITAL PROJECT IDENTIFICATION NO. 3107.00-114-77				

Note:
Stone Curb, Overlay
and Sealed Armored Joint
not shown.



SECTION I-I
Not to Scale

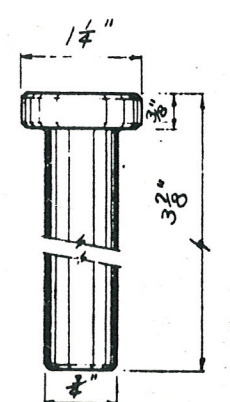


DETAIL FOR CUTTING AND BENDING SEAL
Not to Scale

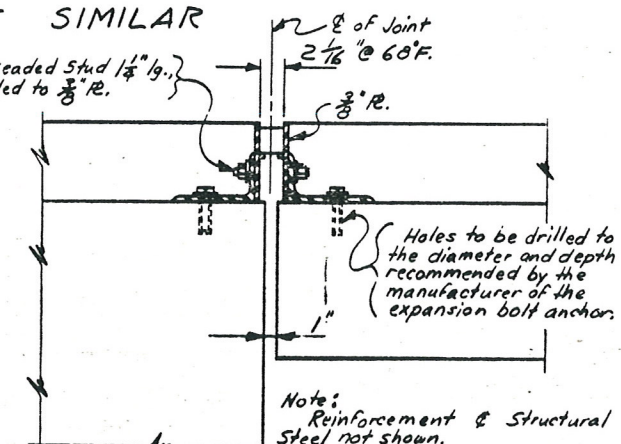
Slab, Backwall & Header Reinforcement
not shown.

ARMORED JOINT SYSTEM			COMPRESSION SEAL		
TYPE	LOCATION	PAY ITEM	TYPE	NOM. WIDTH	DIM "A" @ 68°
A 5 EXPANSION	SOUTH & NORTH ABUTMENTS	567.35	5	3 1/2"	2 1/16"

PLAN-SOUTH ABUTMENT - EAST FASCIA
NORTH ABUTMENT SIMILAR
Not to Scale



DETAIL OF HEADED
CONC. ANCHOR STUD
Not to Scale

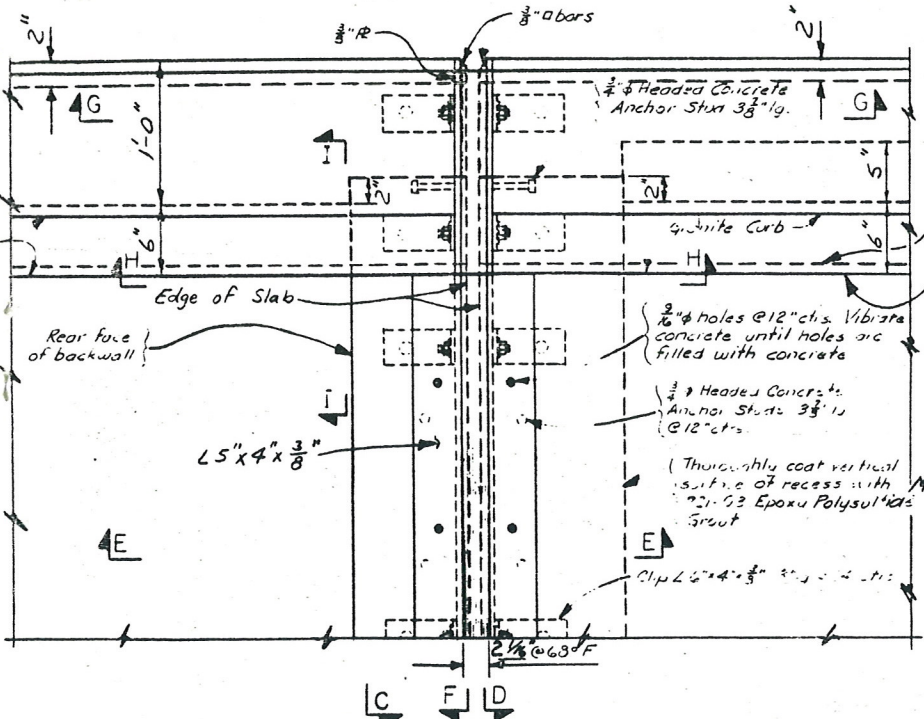


SECTION G-G
Not to Scale

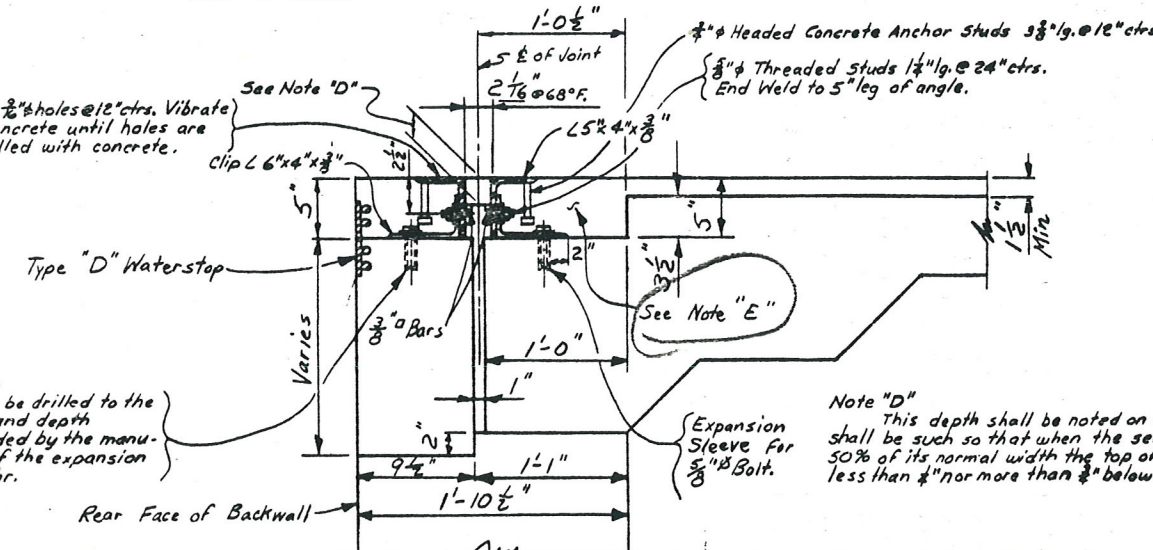
Note "D"
This depth shall be noted on the shop drawings and shall be such so that when the seal is compressed to 50% of its normal width the top of the seal shall not be less than 1/4" nor more than 3/4" below the top of roadway.

It is desirable to have the armored joint with its preformed elastic joint sealer assembled in the shop and delivered to the job site all set for installation in its preformed recess in the structural slab. In cases where the armored joint cannot be assembled in the shop due to its excessive length causing shipping problems, the joint shall be sealed with the preformed elastic joint sealer before the structure is open to traffic, including construction traffic, and before discontinuing operation when work is suspended during the winter.

For details of Type "D" Waterstops see Dwg. No. 19.

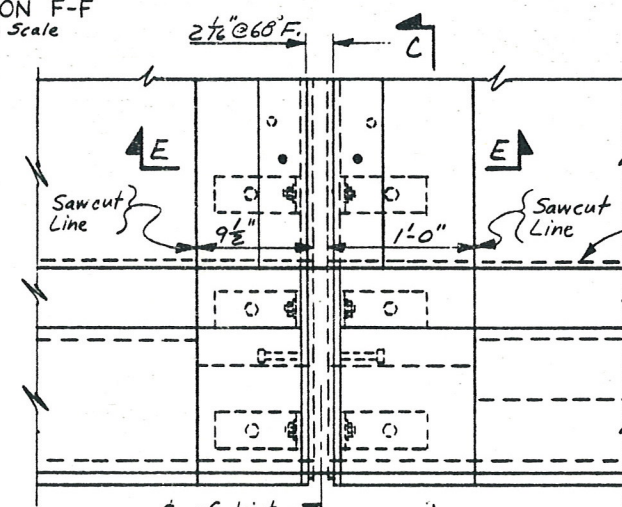


PLAN
SOUTH ABUTMENT - WEST FASCIA
NORTH ABUTMENT SIMILAR
Not to Scale



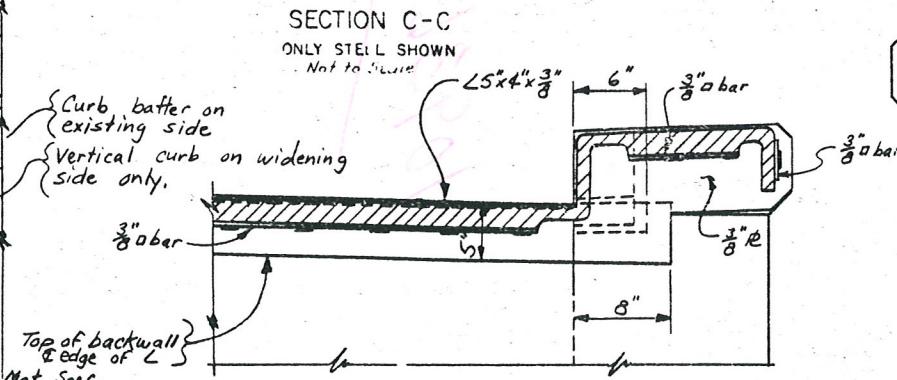
SECTION E-E
Not to Scale

SECTION F-F
Not to Scale

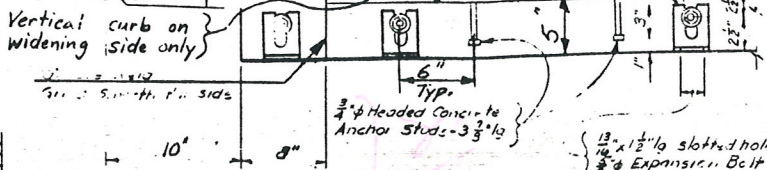


Note:
Sections D-D & H-H
are shown on Dwg. No. 22.
The width of seal before
compression shall be 3 1/2".

SECTION C-C
ONLY STEEL SHOWN
Not to Scale



SECTION D-D
Not to Scale



D258367

D258367

33 - 1093682

I 481 NB / 90IX

MONO-DECK & JOINTS
ABUTMENT BEARINGS & PEDS

STANDARD SHEETS

M203-1, M203-2, M403-1, M502-2, M502-7, M606-3, M606-5,
M606-15R1, M607-2, M607-10, M607-12, M611-1, M619-3R1,
M619-4, M619-5, M670-1, M670-2, M670-3R1

Donna P. Jones 11/16/06
Bruce G. Galla 11/30/06
John C. Galla 11/28/06
Bruce G. Galla 11/19/08
D.S. Hann 11/18/10
Bruce G. Galla 11/18/2011

ALL WORK CONTEMPLATED UNDER THIS CONTRACT IS TO BE COVERED BY
AND IN CONFORMITY WITH THE STANDARD SPECIFICATIONS (METRIC UNITS)
OF JANUARY 2, 1995, AS AMENDED BY ADDENDA NOS. 1 AND 2, EXCEPT AS
MODIFIED ON THESE PLANS AND IN THE ITEMIZED PROPOSAL.Record plans were reviewed
on 12-30-13. No suspect
materials were identified.

US DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION	
APPROVED _____	19 _____
DIVISION ADMINISTRATOR	

BRIDGE DECK OVERLAY PROJECT			
VARIOUS BRIDGES			
I-690, I-81 AND I-481			
ONONDAGA AND OSWEGO COUNTIES			
FED. ROAD REG. NO.	STATE	SHEET NO.	TOTAL SHEETS
1	N.Y.	1	354
FEDERAL AID PROJECT NO.		Q05-3804-206	
CAPITAL PROJECT IDENTIFICATION NO.		3804.06.311	
INDEX ON SHEET NO.		2	

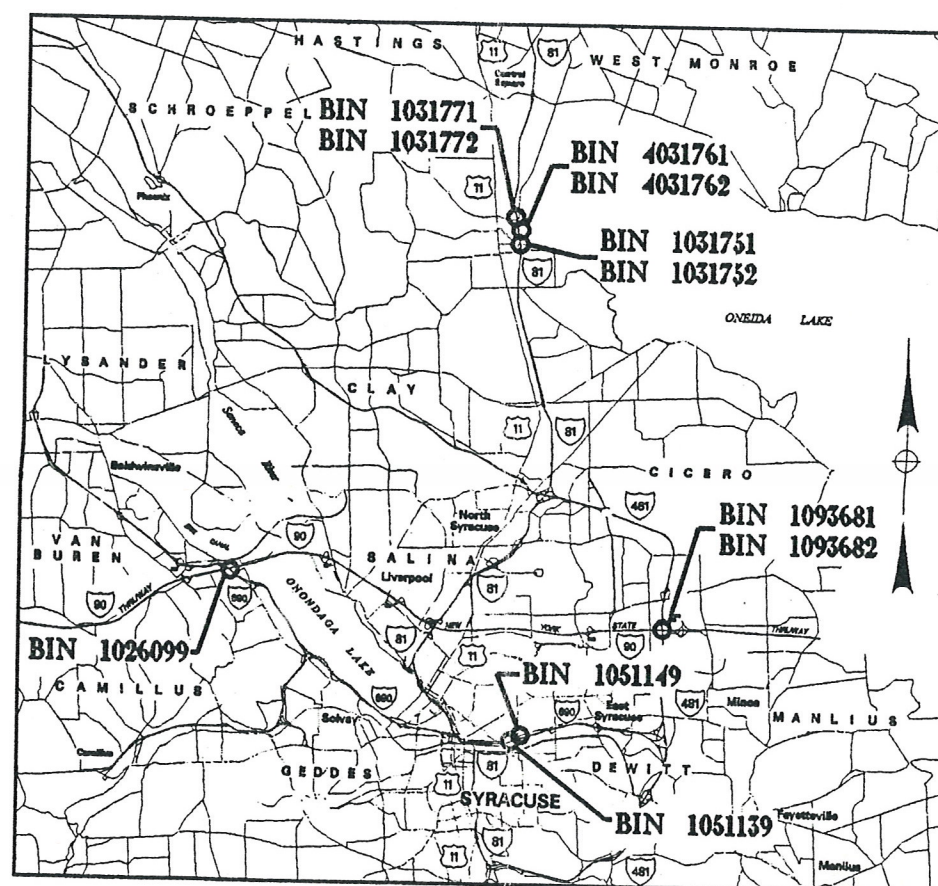
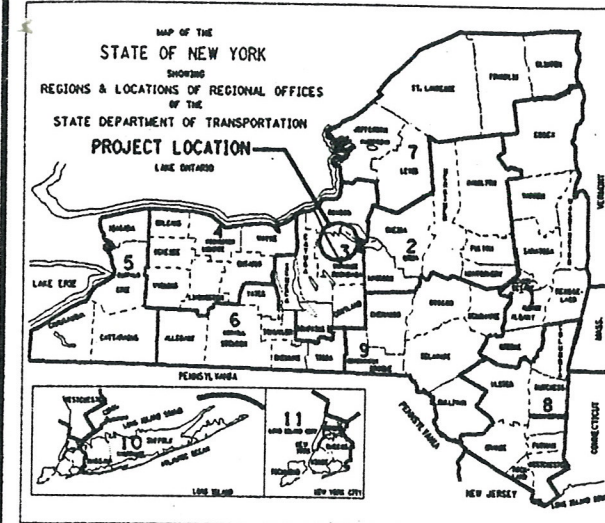
STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION
OFFICE OF ENGINEERINGINTERSTATE BRIDGE DECK OVERLAY PROJECT
VARIOUS BRIDGES ON I-690, I-81 AND I-481

ONONDAGA AND OSWEGO COUNTIES

355 SHEETS

CONTRACT D258367

F.A. PROJECT Q05-3804-206

PROJECT LOCATION
NOT TO SCALE

PROJECT DESCRIPTION

THIS IS A BRIDGE DECK OVERLAY PROJECT
FOR 11 BRIDGES. THE BRIDGES ARE LOCATED
ON I-81, IN OSWEGO AND ONONDAGA COUNTIES
AND I-481 AND I-690 IN ONONDAGA COUNTY
BEGINNING REFERENCE MARKER 811-3303-3122
ENDING REFERENCE MARKER 811-3404-1002
BEGINNING REFERENCE MARKER 4811-3301-2088
ENDING REFERENCE MARKER 4811-3301-2089
BEGINNING REFERENCE MARKER 6901-3301-4014
ENDING REFERENCE MARKER 6901-3301-2040

CONTRACTOR'S NAME _____	
AWARD DATE _____	
COMPLETION DATE _____	
FINAL ACCEPTANCE DATE _____	
REGIONAL DIRECTOR _____	
ENGINEER IN CHARGE _____	
FINAL COST TOTAL _____	
FISCAL SHARE _____	COST(S) _____

RECOMMENDED BY

Edmund W. Wilday
REGIONAL DESIGN ENGINEER

DATE 12/8/99

RECOMMENDED BY

J. E. Patton
REGIONAL CONSTRUCTION ENGINEER

DATE 12-8-99

RECOMMENDED BY

J. E. Patton
REGIONAL TRANSPORTATION MAINTENANCE ENGINEER

DATE 12/8/99

RECOMMENDED BY

J. E. Patton
REGIONAL TRAFFIC ENGINEER

DATE 12-8-99

APPROVED BY

J. E. Patton
REGIONAL DIRECTOR

DATE 12/7/99

D258367

D258367

DESIGN SUPERVISOR


FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D258367	6	354
INTERSTATE BRIDGE DECK OVERLAY PROJECT				
VARIOUS BRIDGES ON I-81, I-690 AND I-481				
ONONDAGA AND OSWEGO COUNTIES				
P.I.N. 3804.06			B.I.N. VARIOUS	

ALL DIMENSIONS ARE IN m UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

SIGNATURE DATE

ESTIMATE OF QUANTITIES BY STRUCTURE



STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME 380406AB.N1B	REGION 3	DATE 1/00	DRAWING NO. EQ-1
--------------------------	-------------	--------------	---------------------

FILE: 380406.DWG
DATE/TIME = 22-DEC-1999 10:17
USER = dksmith

DESIGN SUPERVISOR _____ JOB MANAGER _____
CHECKED BY _____ DESIGNED BY _____
DRAFTED BY _____ ESTIMATED BY _____
CHECKED BY _____

QUANTITY ESTIMATE BY STRUCTURE																									
ITEM	DESCRIPTION	UNIT	B.I.N. 1026099		B.I.N. 1031751		B.I.N. 1031752		B.I.N. 1031771		B.I.N. 1031772		B.I.N. 1051139		B.I.N. 1051149		B.I.N. 1093681		B.I.N. 1093682		B.I.N. 4031761		B.I.N. 4031761		
			QTY	FINAL	QTY	FINAL	QTY	FINAL	QTY	FINAL	QTY	FINAL	QTY	FINAL	QTY	FINAL	QTY	FINAL	QTY	FINAL	QTY	FINAL	QTY	FINAL	
579.02M	REINFORCING BAR EXPOSURE	SM	912		378		439		525		525		6909		371		977		766						
580.01M	REMOVAL OF STRUCTURAL CONCRETE	CM	34		6		5		4		4		260		3		12		13		6		6		
580.04M	REMOVAL OF CONCRETE APPROACH SLAB	SM							155		154														
581.01M	REMOVAL OF BITUMINOUS CONCRETE OVERLAY (BRIDGE)	SM			431		492		776		781										1773		1773		
581.02M	REMOVAL OF CEMENT CONCRETE OVERLAY	SM																			1760		1760		
582.07M	REM STRUCT CONC - REPLACE W/ VERT & O.H. PATCH MATL	SM																			7		7		
585.01M	STRUCTURAL LIFTING, TYPE A	SM			9		8										12		12						
585.02M	STRUCTURAL LIFTING, TYPE B	SM	1										2												
585.03M	STRUCTURAL LIFTING, TYPE C	SM											2												
586.01M	DRILLING AND GROUTING BOLTS OR REINFORCING BARS	NM	83,406		23,400		23,400		48,000		48,000		237,300		30,600		44,400		44,400		12,000		12,000		
587.01M	BRIDGE RAILING REMOVAL AND DISPOSAL	M			69		69		92		92						166		166		296		296		
587.1002M	BOX BEAM BRIDGE RAIL, TWO RAIL	M			30		30		42		42										296		296		
589.520001M	REMOVAL OF EXISTING STEEL (EA)	EA			1		2																		
589.520002M	REMOVAL OF EXISTING STEEL (EA)	EA			1		2																		
589.520003M	REMOVAL OF EXISTING STEEL (EA)	EA	1																						
589.520004M	REMOVAL OF EXISTING STEEL (EA)	EA											10												
589.520005M	REMOVAL OF EXISTING STEEL (EA)	EA															12		10						
589.520006M	REMOVAL OF EXISTING STEEL (EA)	EA			5		5														5		4		
590.01M	VERTICAL ADJUSTMENT OF BRIDGE DRAINAGE DEVICES	EA			2		2		4		4														
590.02M	VERTICAL ADJUSTMENT OF BRIDGE DRAINAGE DEVICES	EA																							
606.1203M	BOX BEAM GUIDE RAIL END ASSEMBLY, TYPE III	EA															1		1						
606.5910M	RESETTING OF ANCH UNITS FOR CORR BM GR & MED BAR	EA															2								
606.71M	REMOVE AND DISPOSE CORRUGATED BEAM GUIDE RAIL	M															27								
606.73M	REMOVE AND DISPOSE OF BOX BEAM GUIDE RAIL	M			27		27		27		27						93		93		27		27		
16606.80M	TRANSITION BRIDGE RAIL OR CONC BARRIER TO BOX BEAM	EA			27		27		27		27						33		40		27		27		
16607.0641M	SNOW FENCING ON BRIDGES	M	112						36		36						92		92						
609.15M	RESETTING CURB	M											475												
670.1108M	ALUM. LIGHT STANDARDS FOR SINGLE MEMBER/TRUSS ARMS	EA											8												
670.1224M	ALUM. SINGLE MEMBER BRACKET ARM, 2.4m LONG	EA											8												
670.2305M	GALVINIZED STEEL PLASTIC COATED CONDUIT, 1½ NPS	M											8												
670.3001M	PULLBOXES LESS THAN 0.14CM, INSIDE VOLUME (LIGHTING)	EA											8												
670.7501M	GROUND WIRE NO 6 AWG.	EA											9												
670.81M	REMOVE AND DISPOSE OF LAMPOST ASSEMBLY	EA											8												
				</																					

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D258367	7	354
INTERSTATE BRIDGE DECK OVERLAY PROJECT				
VARIOUS BRIDGES ON I-81, I-690 AND I-481				
ONONDAGA AND OSWEGO COUNTIES				
P.I.N. 3804.06			B.I.N. VARIOUS	

ALL DIMENSIONS ARE IN m UNLESS OTHERWISE NOTED
AS BUILT REVISIONS

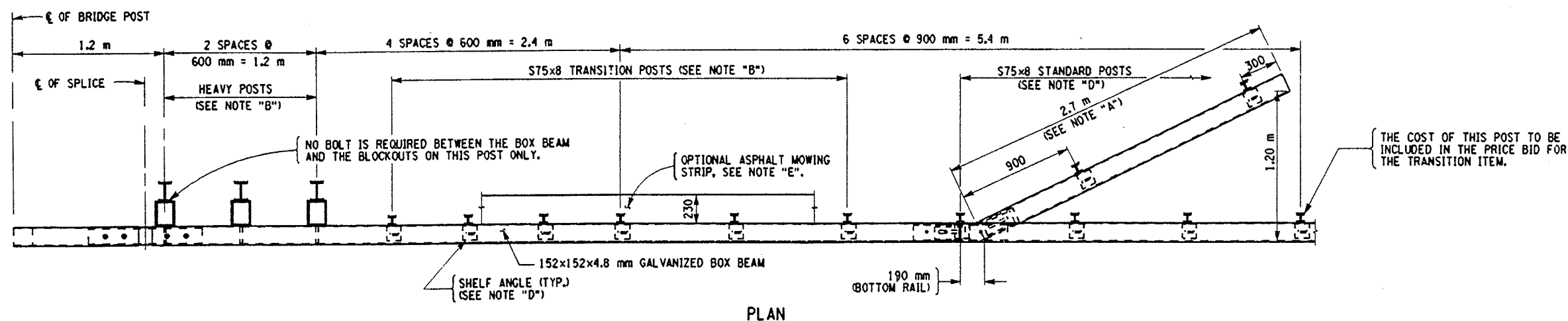
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ESTIMATE OF QUANTITIES BY STRUCTURE

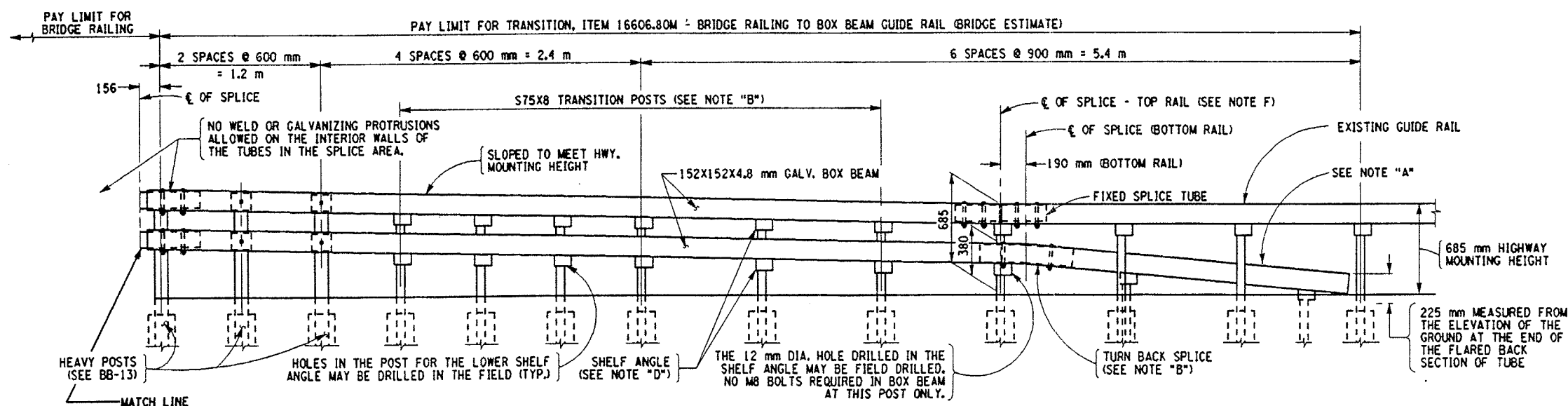
STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME	REGION	DATE	DRAWING NO.
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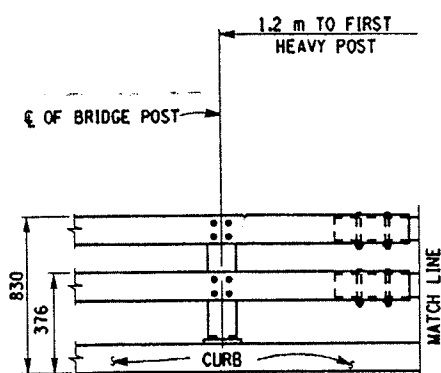
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1	N.Y.	D258367	28	354
INTERSTATE BRIDGE DECK OVERLAY PROJECT				
VARIOUS BRIDGES ON I-690, I-81 AND I-481				
ONONDAGA AND OSWEGO COUNTIES				
P.I.N. 3804.06		B.I.N. SEE NOTE 2		



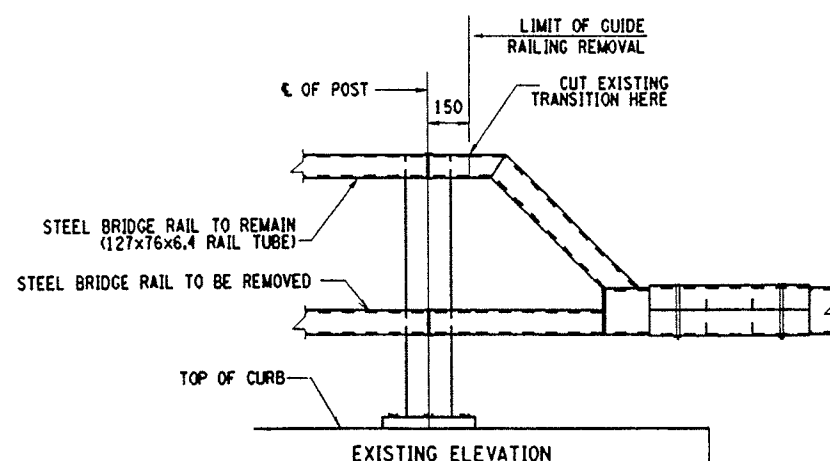
PLAN



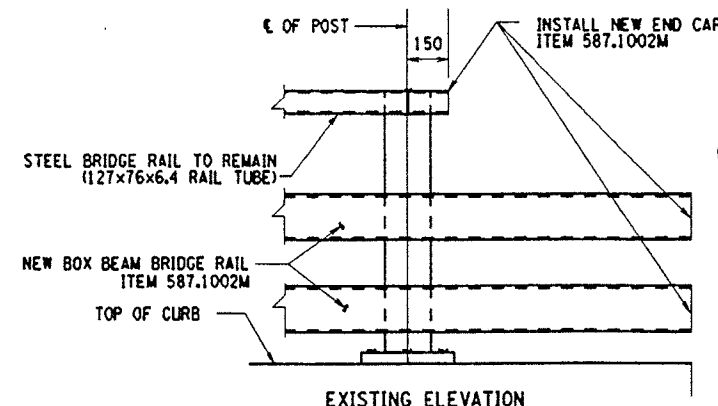
ELEVATION
SCALE 1:20



ELEVATION TWO RAIL WITH BRUSH CURB
SCALE 1:20



EXISTING RAIL END TREATMENT



PROPOSED RAIL END TREATMENT

- NOTE "A":
THE COST OF THE POSTS, SPLICE TUBE AND RAIL FOR THE LOWER TUBE FLARE SECTION IS INCLUDED IN THE PRICE BID FOR THE TRANSITION ITEM.
- NOTE "B":
FOR ADDITIONAL DETAILS SEE DWG. BB-12 & 13.
- NOTE "C":
PROTRUSIONS CAUSED BY WELDING OR GALVANIZING ARE NOT PERMITTED ON THE ADJOINING SURFACES OF THE BOX BEAM RAILS, SPLICE TUBES AND FILL PLATES.
- NOTE "D":
SEE TYPICAL RAIL TO POST CONNECTION DETAIL ON CURRENT HIGHWAY STANDARD SHEET TITLED "BOX BEAM GUIDE RAIL".
- NOTE "E":
PAVE THE OPTIONAL ASPHALT MOWING STRIP WITH THE HMA ASPHALT. PAYMENT WILL BE MADE UNDER HMA ITEM. 06403.127202M
- NOTE "F":
IF NECESSARY, THE LOCATION OF THE SPLICE OF THE TOP TRANSITION RAIL TUBE SHALL BE MOVED TO THE NEXT SPLICE IN THE EXISTING BOX BEAM GUIDE RAIL. THIS WILL INCREASE THE LENGTH OF TOP TRANSITION RAIL TUBE AND ELIMINATE ANY SHORT LENGTHS OF EXISTING BOX BEAM. COST TO BE INCLUDED IN THE PRICE BID FOR ITEM 16606.80M.

- NOTES:
1. ALL STEEL SHALL BE GALVANIZED IN ACCORDANCE WITH N.Y.S. STANDARD SPECIFICATIONS, SUBSECTION 719-01. ALL AREAS WHERE THE ZINC COATING IS DAMAGED DURING INSTALLATION, INCLUDING FIELD DRILLING HOLES, SHALL BE REPAIRED ACCORDING TO SUBSECTION 719-01.
 2. THESE DETAILS APPLY TO BINS 1031751(2), 4031761(2), 1031771(2) AND 1093681(2).

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED
AS BUILT REVISIONS

SIGNATURE DATE
I-81 OVER CIRC. CHANNEL / CANAL / SWAMP RD

BRIDGE RAIL TRANSITION DETAILS
1 OF 3 SHEETS

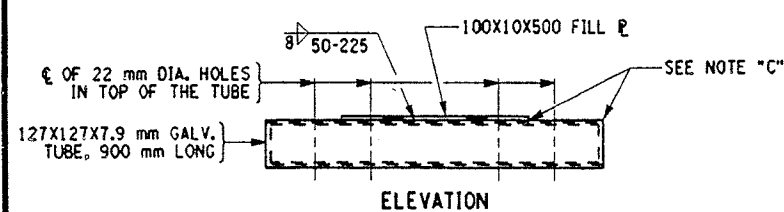
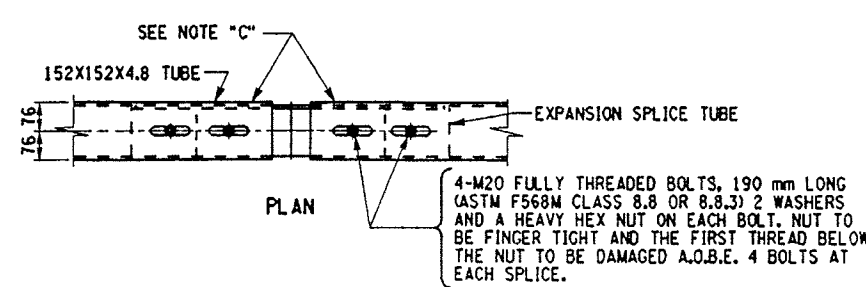
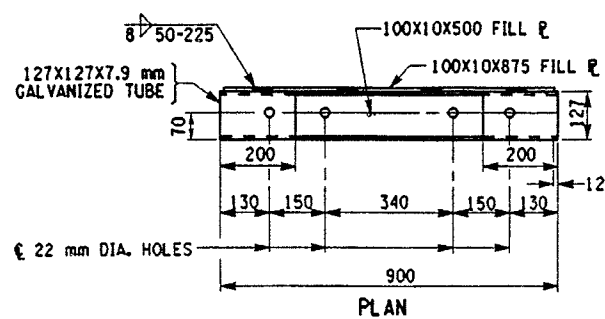
STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME REGION DATE DRAWING NO.
380406BB.R1A 3 12/99 BB-11

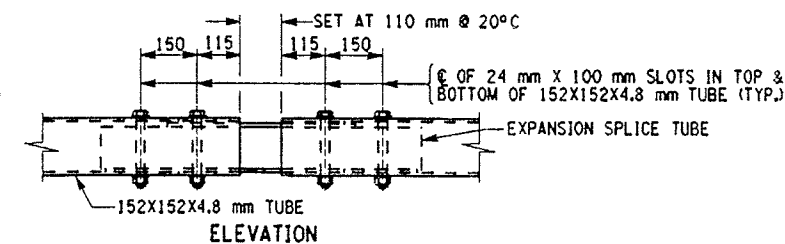
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USER = dsmith

CHECKED BY
DRAFTED BY
ESTIMATED BY
CHECKED BY
DESIGNED BY
JOB MANAGER
DESIGN SUPERVISOR

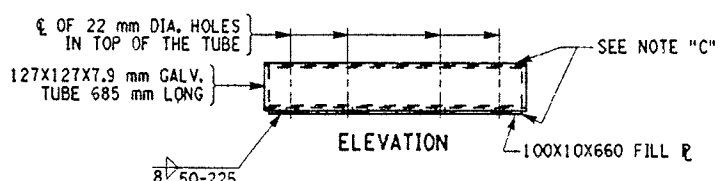
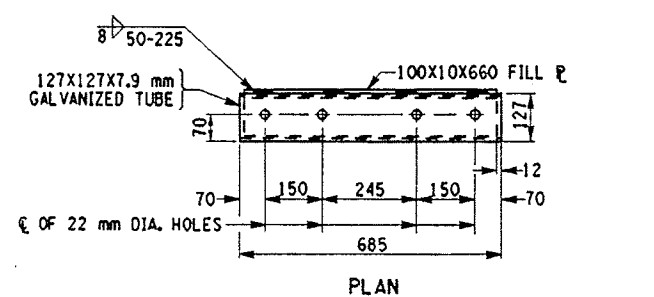
FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D258367	29	354
INTERSTATE BRIDGE DECK OVERLAY PROJECT				
VARIOUS BRIDGES ON I-690, I-81 AND I-481				
ONONDAGA AND OSWEGO COUNTIES				
P.I.N. 3804.06		B.I.N. SEE NOTE 1		



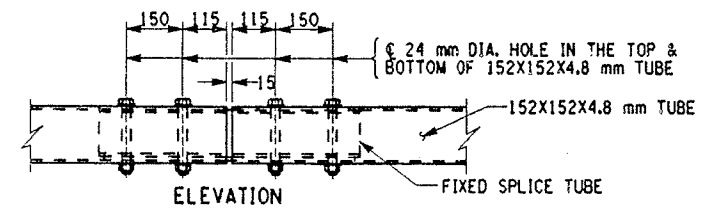
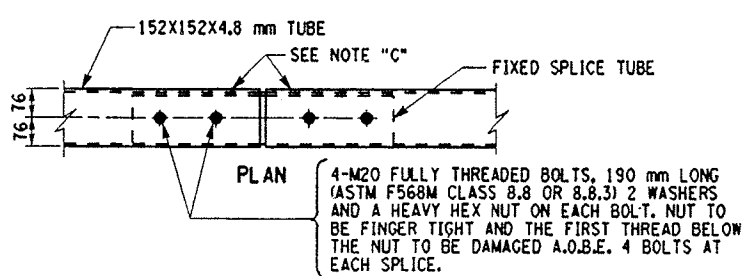
EXPANSION SPLICE TUBE
SCALE 1:10



EXPANSION SPLICE ASSEMBLY
SCALE 1:10

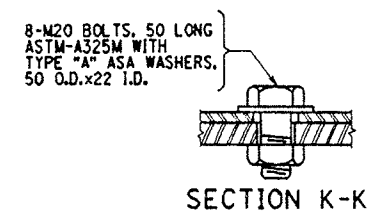


FIXED SPLICE TUBE
SCALE 1:10

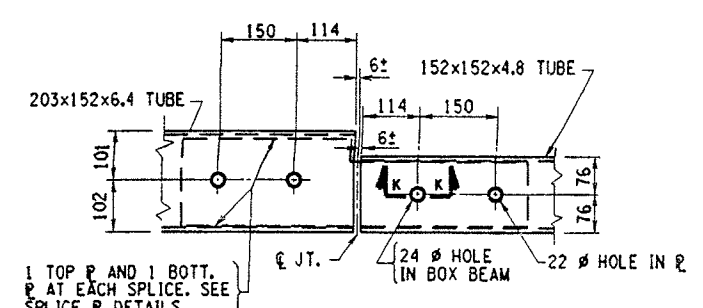


FIXED SPLICE ASSEMBLY
SCALE 1:10

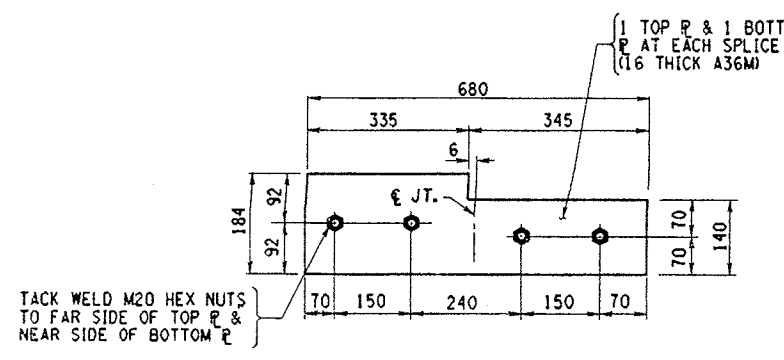
SPLICE DETAILS FOR 152x152 TUBES



SECTION K-K



SPLICE DETAIL



SPLICE PLATE DETAIL

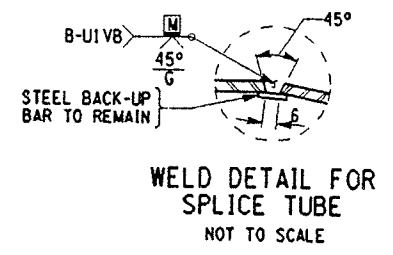
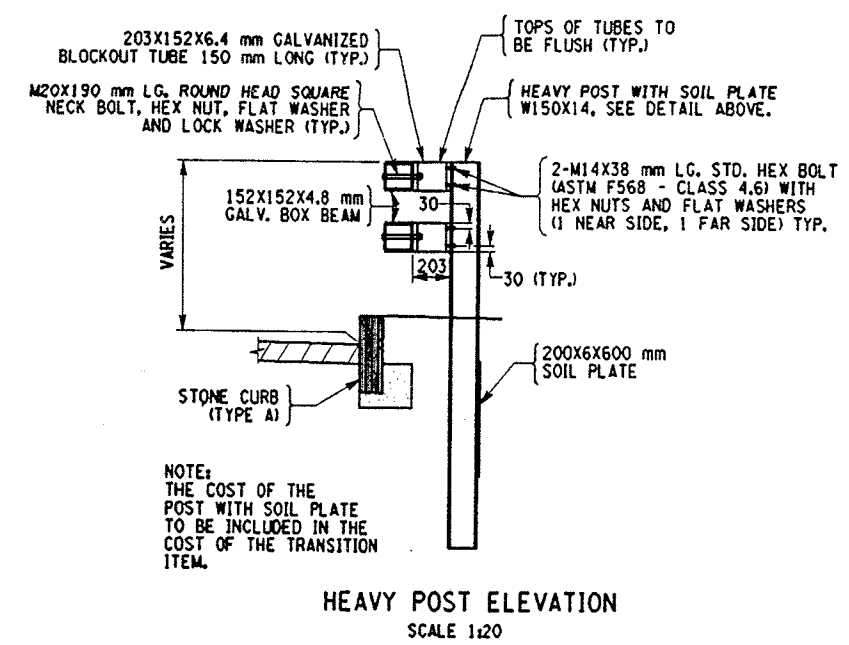
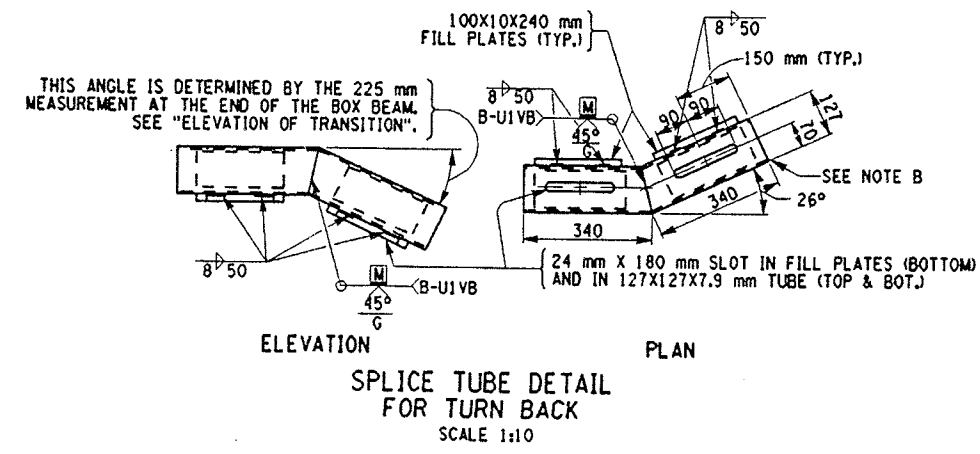
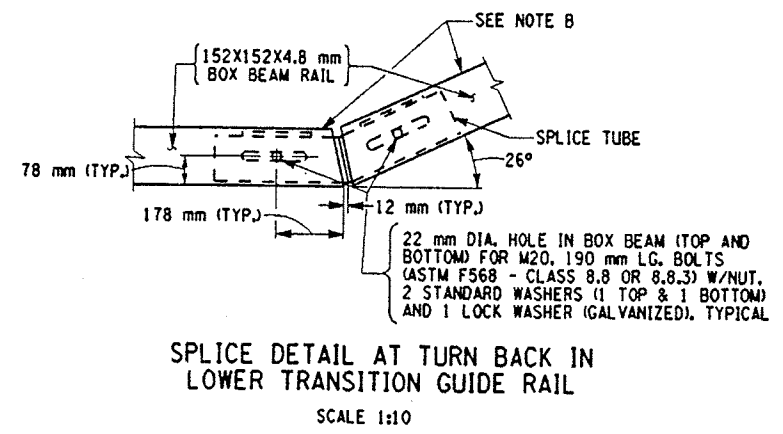
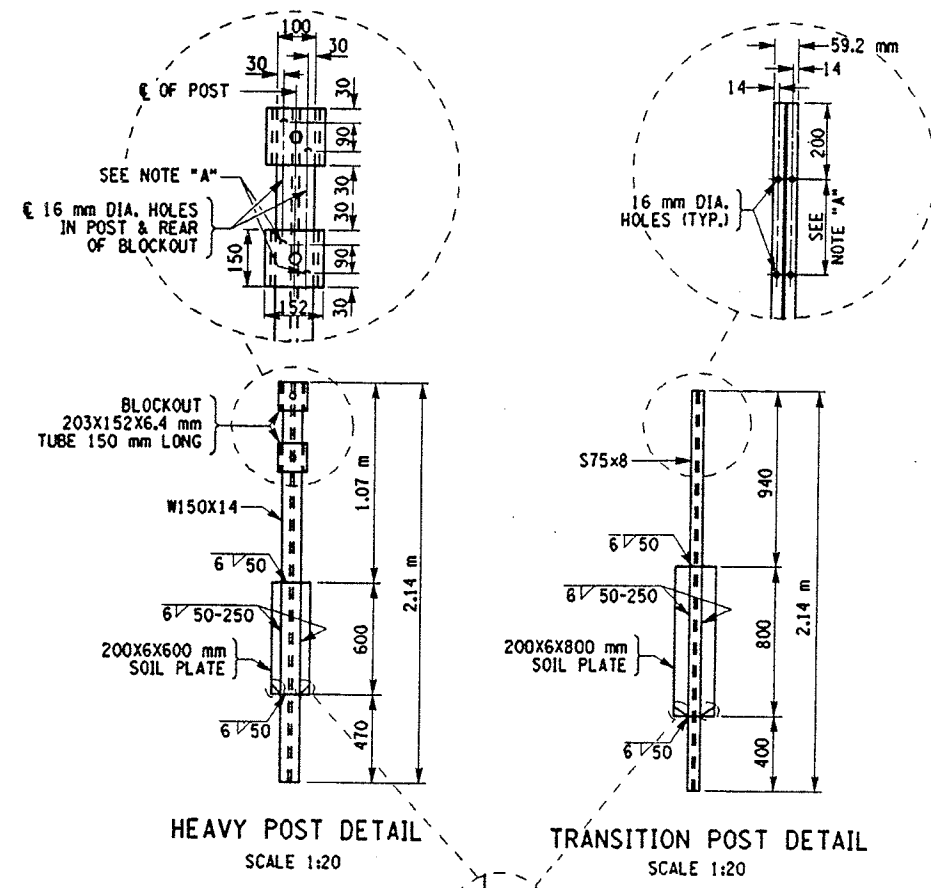
SPLICE DETAILS FOR 203x152 TUBES

- NOTES:
1. THESE DETAILS APPLY TO BINS 1031751(2), 4031761(2), 1031771(2) AND 1093681(2).

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED			
<u>AS BUILT REVISIONS</u>			
SIGNATURE		DATE	
I-81 OVER CIRC. CHANNEL / CANAL / SWAMP RD			
BRIDGE RAIL TRANSITION DETAILS			
2 OF 3 SHEETS			
STATE OF NEW YORK			
DEPARTMENT OF TRANSPORTATION			
FILENAME	REGION	DATE	DRAWING NO.
380406BB.R1A	3	12/99	BB-12

CHECKED BY
DRAFTED BY
ESTIMATED BY
CHECKED BY
DESIGNED BY
JOB MANAGER
DESIGN SUPERVISOR

FED. ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D258367	30	354
INTERSTATE BRIDGE DECK OVERLAY PROJECT				
VARIOUS BRIDGES ON I-690, I-81 AND I-481				
ONONDAGA AND OSWEGO COUNTIES				
P.I.N. 3804.06		B.I.N. SEE NOTE 2		



- NOTES:
- FOR SPECIAL POST DETAIL, SEE DWG. CB-9.
 - FOR SPLICE DETAILS FOR THE 152X153X4.8 TUBES, SEE DWG. BB-12.
 - ALL STEEL SHALL BE GALVANIZED AFTER WELDING IN ACCORDANCE WITH THE N.Y.S. STANDARD SPECIFICATION SUBSECTION 719-01.
- NOTE "A"
HOLES IN THE POST FOR THE LOWER RAIL MAY BE LOCATED AND DRILLED IN THE FIELD. IF SO, THE GALVANIZING SHALL BE REPAIRED IN ACCORDANCE WITH SUBSECTION 719-01.
- NOTE "B"
PROTRUSIONS CAUSED BY WELDING OR GALVANIZING ARE NOT PERMITTED ON THE ADJOINING SURFACES OF THE BOX BEAM RAILS, SPLICE TUBES AND FILL PLATES.

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

SIGNATURE _____ DATE _____

I-81 OVER CIRC. CHANNEL / CANAL / SWAMP RD

BRIDGE RAIL TRANSITION DETAILS
3 OF 3 SHEETS

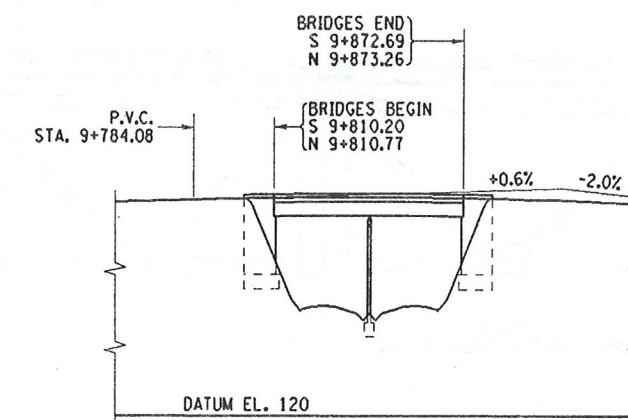
STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME 380406BB_R1A REGION 3 DATE 12/99 DRAWING NO. BB-13

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D258367	111	354
INTERSTATE BRIDGE DECK OVERLAY PROJECT				
VARIOUS BRIDGES ON I-690, I-81 AND I-481				
ONONDAGA AND OSWEGO COUNTIES				
P.J.N. 3804.06			B.I.N. 1093681 & 2	

WORK TO BE DONE: (NOT NECESSARILY IN THIS ORDER)

1. REMOVE EXISTING CONCRETE WEARING SURFACE.
2. REMOVE EXISTING JOINTS.
3. EXPOSE RE-BARS ON 100% OF DECK AREA.
4. PLACE SLAB RECONSTRUCTION CONCRETE AND NEW CONCRETE OVERLAY.
5. PLACE NEW MAC JOINTS.
6. REPLACE EXISTING ABUTMENT BEARINGS.
7. PERFORM CONCRETE REPAIRS TO FASCIA.
8. REPLACE EXISTING BRIDGE RAIL AND RAIL TRANSITIONS.



NOTE:

IF THE CONTRACTOR ELECTS TO LIFT ONLY ONE GIRDER AT A TIME PER SPAN (TO A MAXIMUM OF 3mm TO REMOVE LOAD FROM BEARING), NO VEHICULAR TRAFFIC RESTRICTIONS WILL BE REQUIRED AS STATED IN SPECIFICATION SECTION 585 - STRUCTURAL LIFTING OPERATIONS.

ALL DIMENSIONS ARE IN m UNLESS OTHERWISE NOTED
AS BUILT REVISIONS

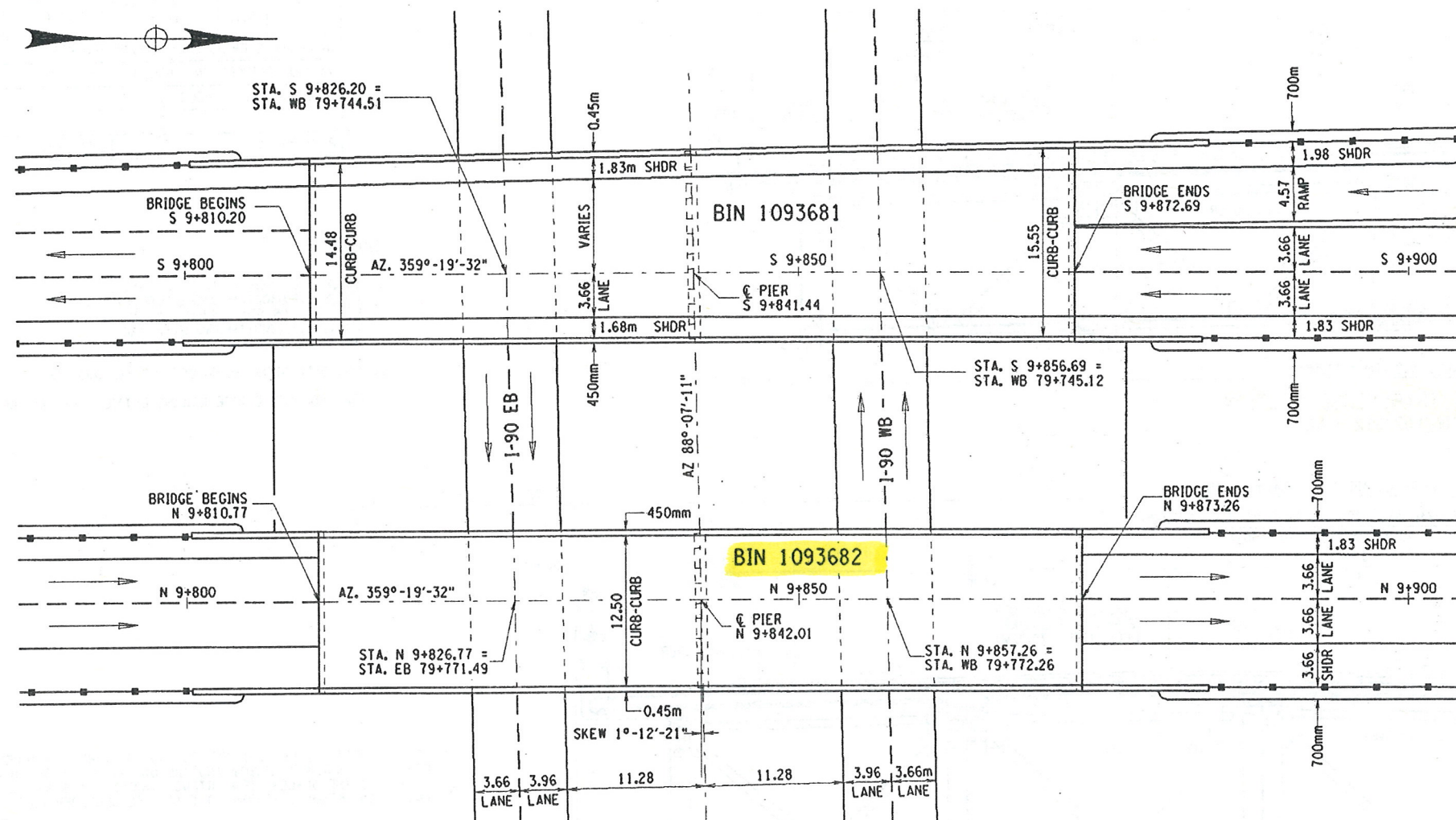
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I-481 OVER I-90
GENERAL PLAN VIEW AND ELEVATION

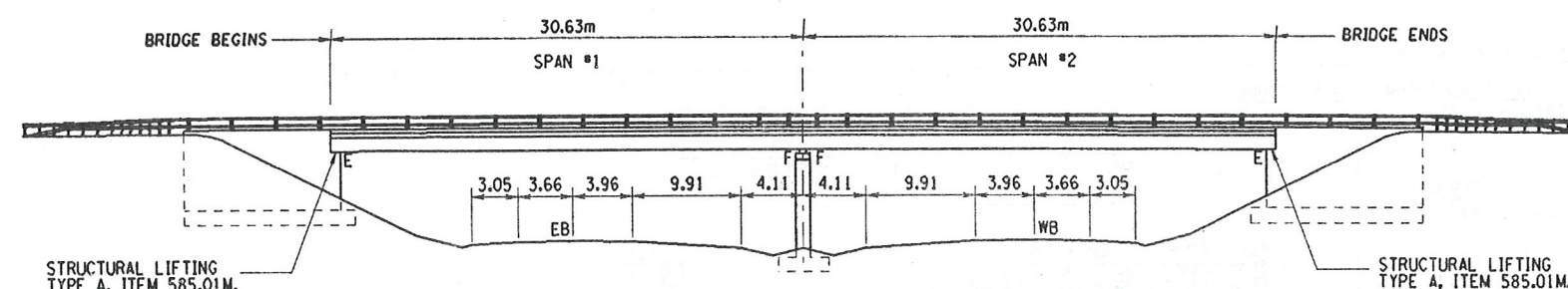


STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME	REGION	DATE	DRAWING NO.
380406GB.G1B	3	12/99	GB-1



PLAN VIEW
SCALE: 1 TO 250



ELEVATION VIEW
SCALE: 1 TO 250

	BEARING LOADS	
	ITEM 585.01M (ABUT.)	ITEM 585.01M (ABUT.)
	SPAN #1	SPAN #2 ABUTMENT
REACTION DUE TO DEAD LOAD	350 KN	350 KN
MAX. LL + I REACTION	250 KN	250 KN

MS LOAD RATING (LFD)	
INVENTORY	OPERATING
MS-17.23 (30.84 MT)	MS-33.56 (60.78 MT)

CHECKED BY

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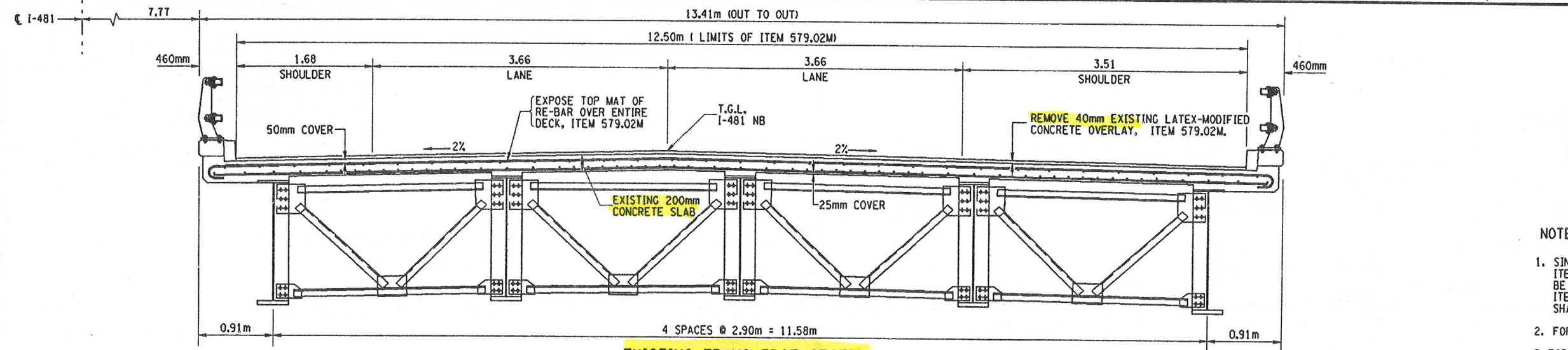
DESIGNED BY

JOB MANAGER

DESIGN SUPERVISOR

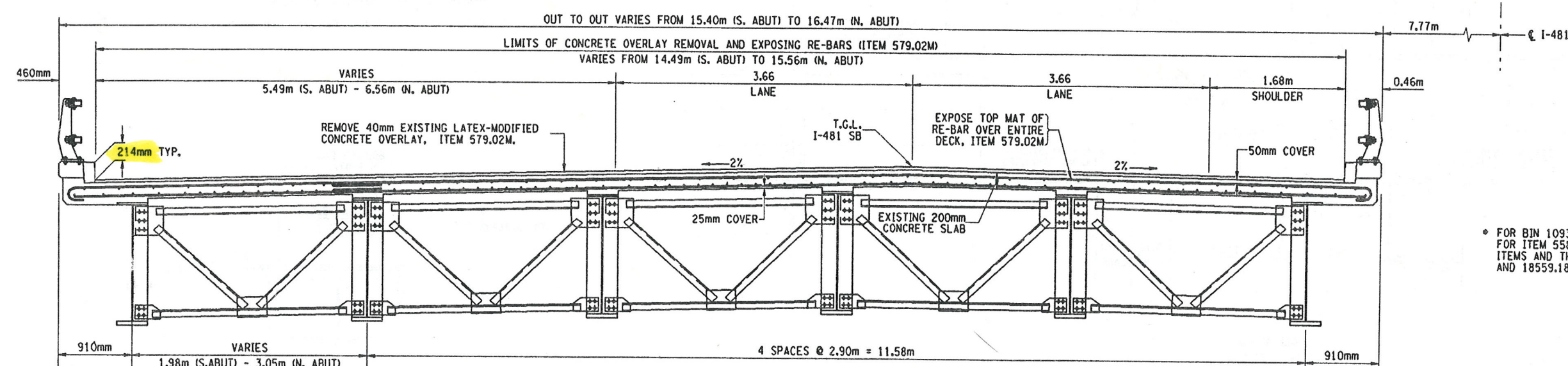
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JOB MANAGER
DESIGN SUPERVISOR

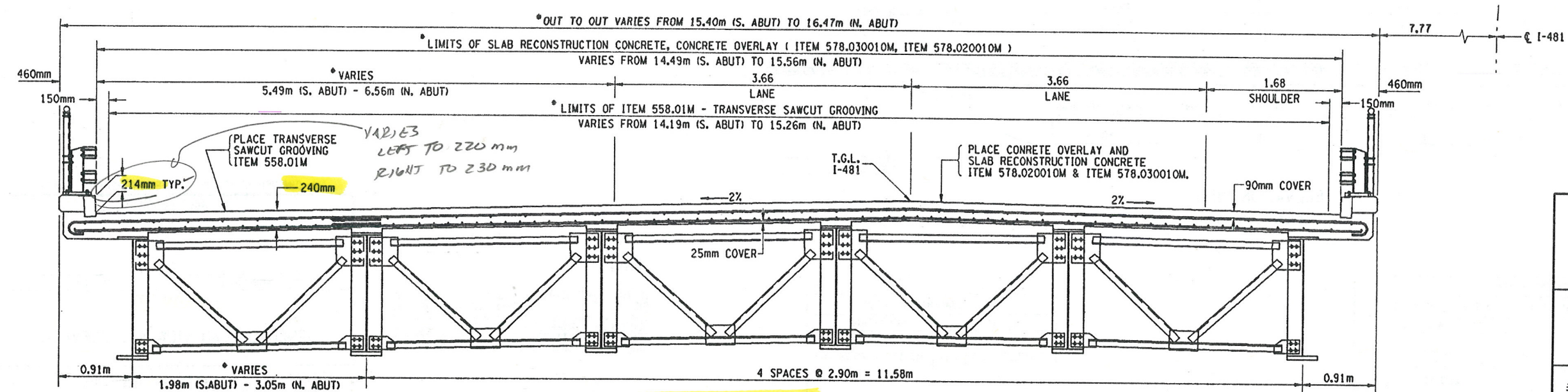


FED. ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D258367	112	354
INTERSTATE BRIDGE DECK REPAIR PROJECT				
VARIOUS BRIDGES ON I-690, I-81 AND I-481				
ONONDAGA AND OSWEGO COUNTIES				
P.I.N. 3804.06		B.I.N. 1093681 & 2		

- NOTES
1. SINCE THE OVERLAY ITEMS ARE SERIALIZED, ITEMS 578.030010M, AND 578.020010M SHALL BE USED FOR BIN 1093681, WHEREAS ITEMS 578.030011M AND 578.020011M SHALL BE USED FOR BIN 1093682.
 2. FOR DECK REINFORCING DETAILS SEE DWG. SS-2.
 3. FOR PROPOSED BRIDGE RAILING DETAILS SEE DWG. GB-10.



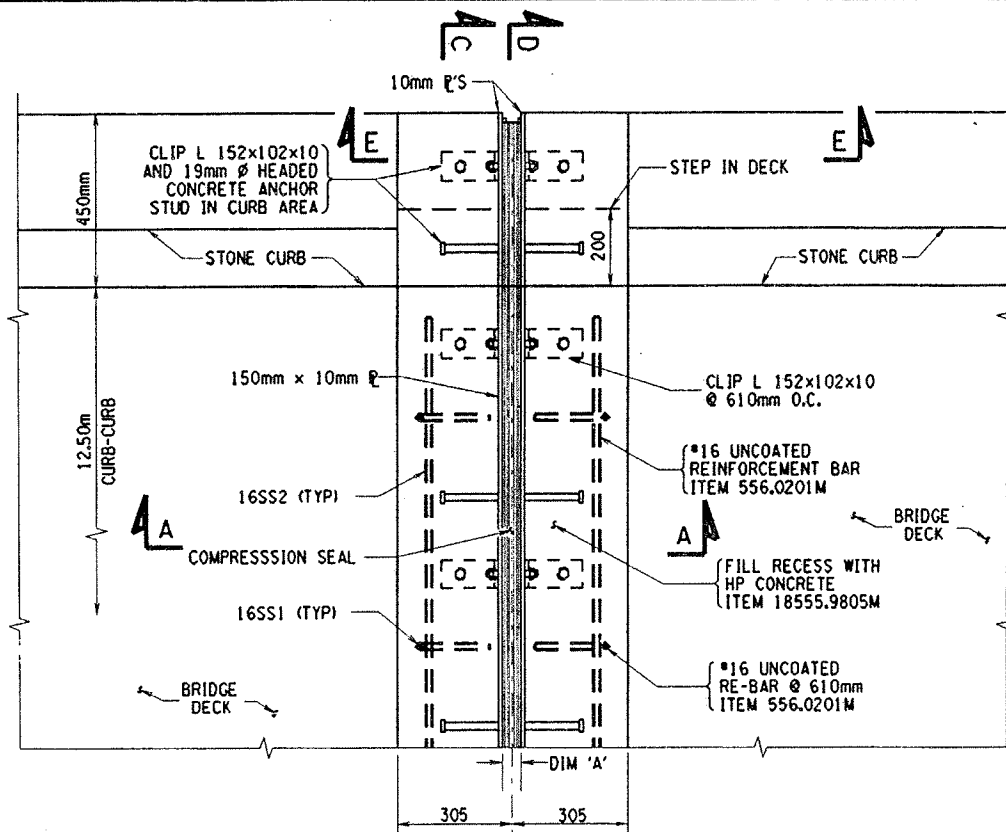
* FOR BIN 1093682, THESE DIMENSIONS DO NOT VARY. THE DIMENSION FOR ITEM 558.01M IS 12.20m AND THE DIMENSION FOR THE OVERLAY ITEMS AND THE SEALER ITEM (ITEMS 578.030010M, 578.020010M, AND 18559.1896M) IS 12.50m. THE OUTSIDE SHOULDER WIDTH IS 3.51m.



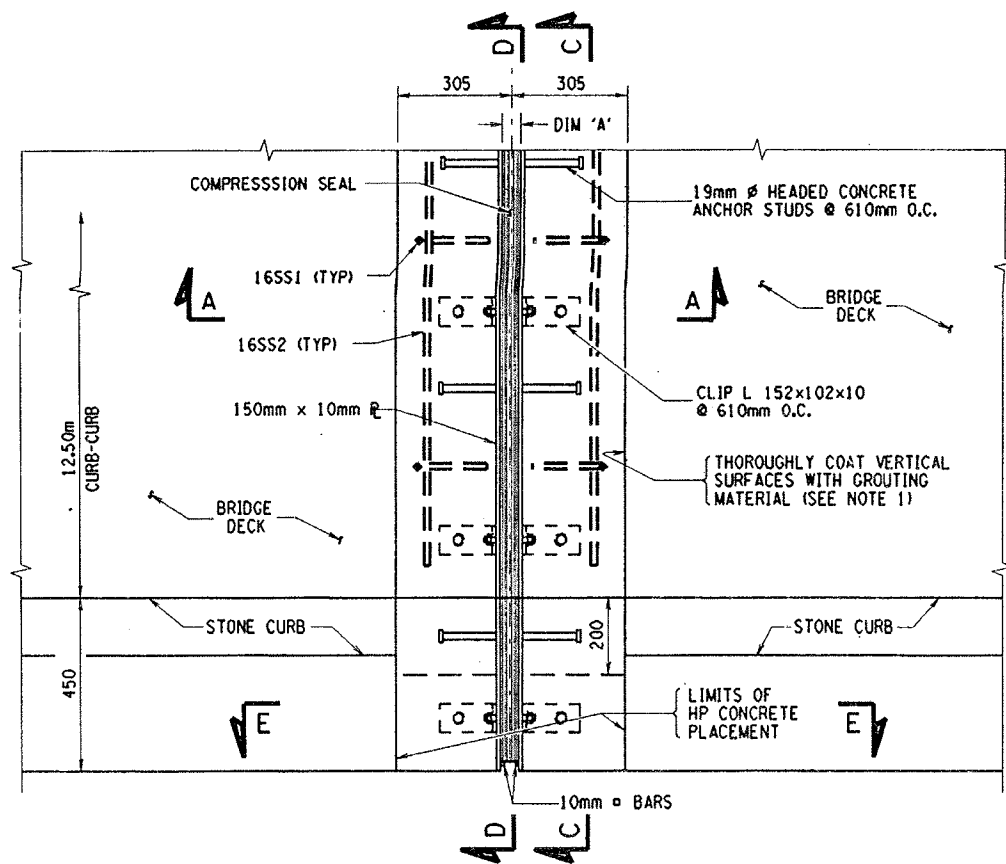
ALL DIMENSIONS ARE IN m UNLESS OTHERWISE NOTED
AS BUILT REVISIONS

SIGNATURE	DATE		
I-481 OVER I-90			
EXISTING AND PROPOSED TRANSVERSE SECTIONS			
STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION			
FILENAME 380406GB.T1A	REGION 3	DATE 1/00	DRAWING NO. GB-2

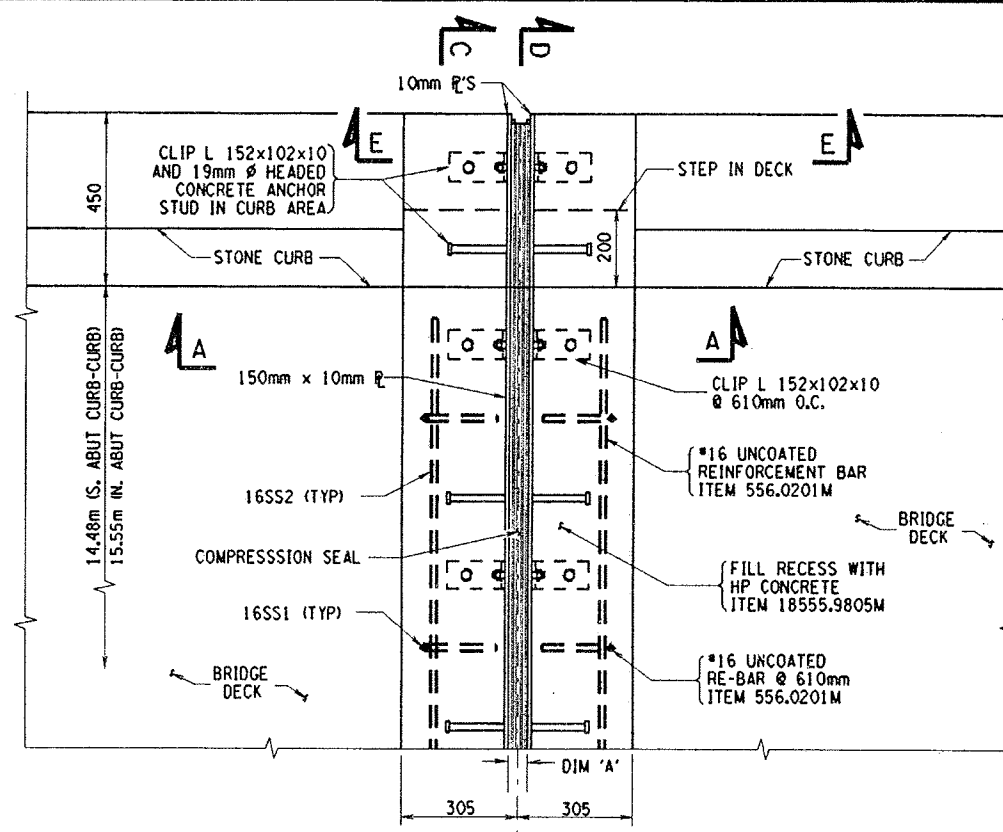
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CHECKED BY
DESIGNED BY
JOB MANAGER
DESIGN SUPERVISOR
USER = gahuboo



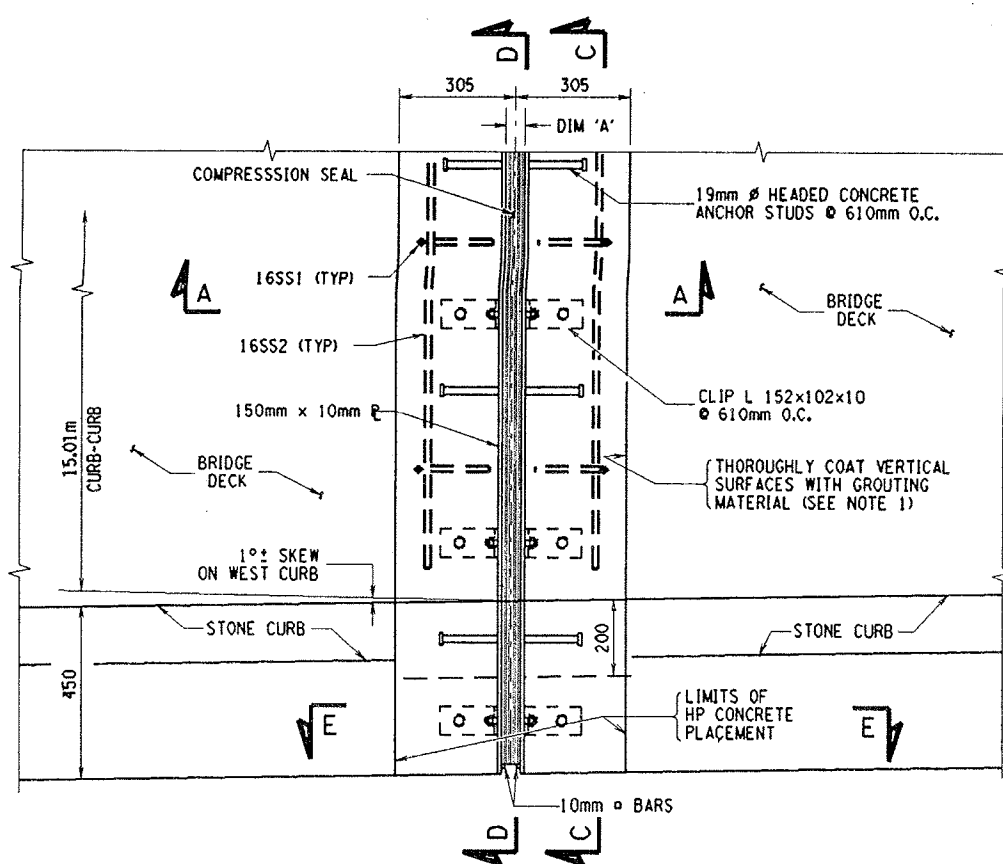
DIRECTION OF TRAFFIC →



PROPOSED PIER JOINT PLAN VIEW
BIN 1093682 - PIER 1
SCALE: 1 TO 10



DIRECTION OF TRAFFIC →



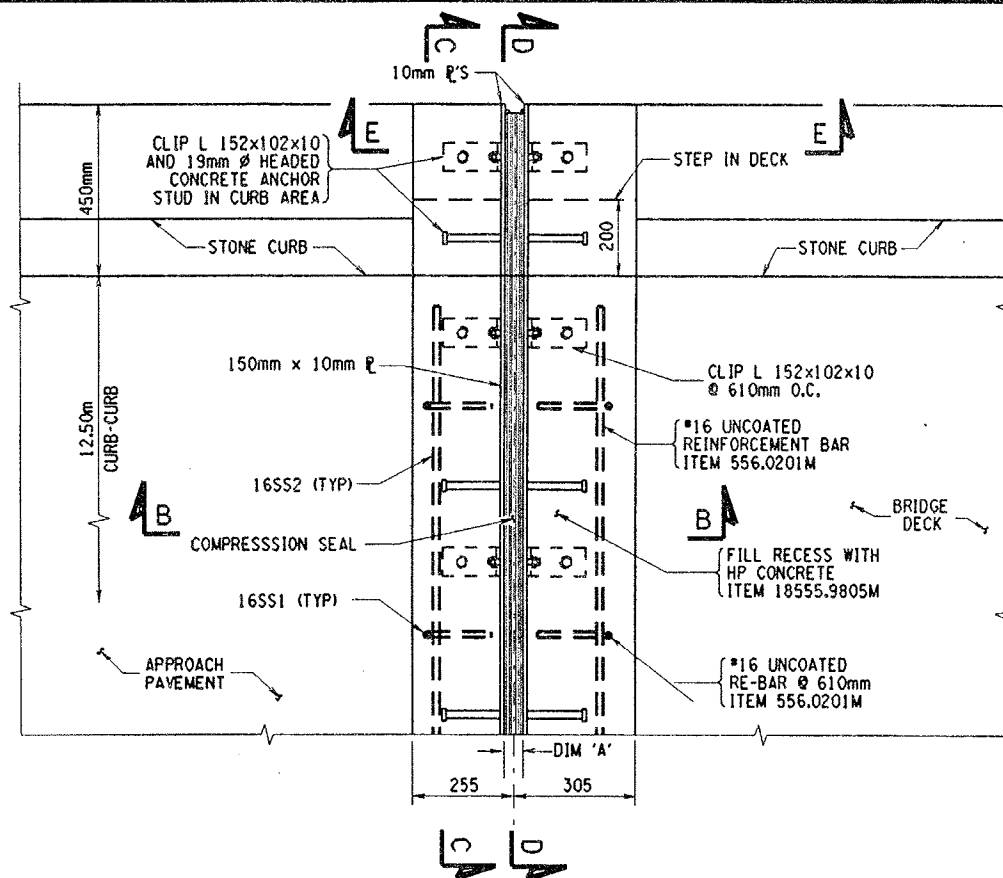
PROPOSED PIER JOINT PLAN VIEW
BIN 1093681 - PIER 1
SCALE: 1 TO 10

FED. ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D258367	113	354
INTERSTATE BRIDGE DECK OVERLAY PROJECT				
VARIOUS BRIDGES ON I-690, I-81 AND I-481				
ONONDAGA AND OSWEGO COUNTIES				
P.I.N. 3804.06		B.I.N. 1093681 & 2		

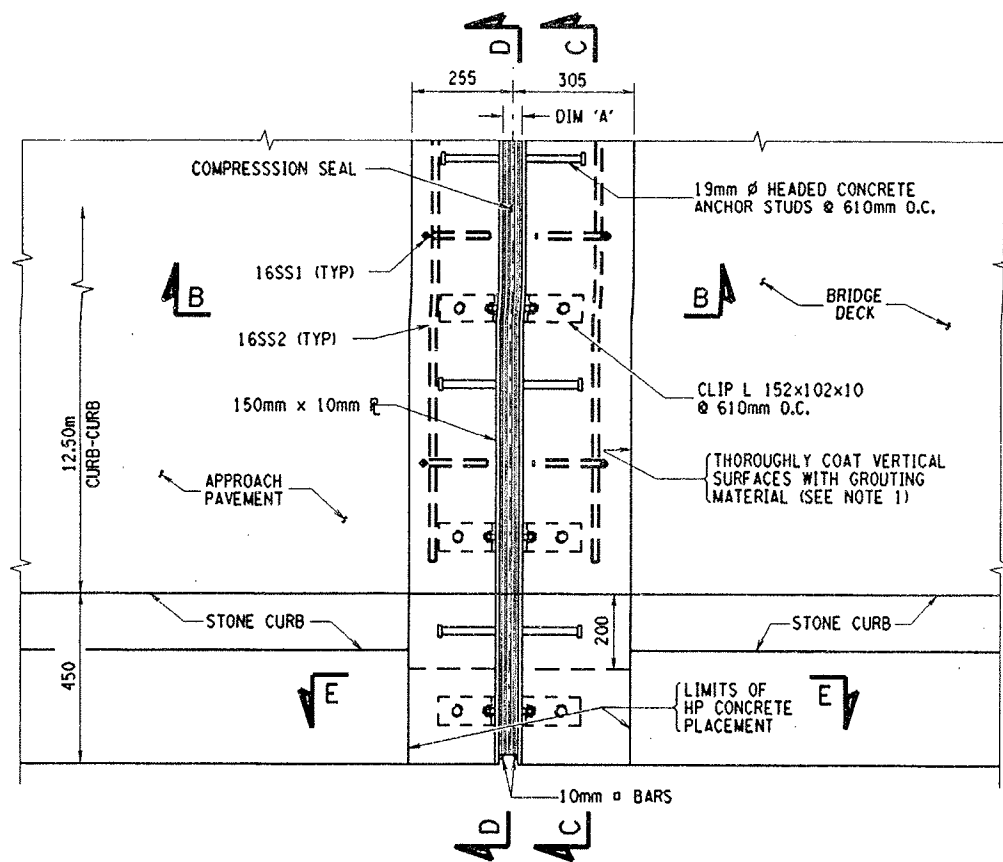
- NOTES:
1. THOROUGHLY COAT THE BOTTOM AND VERTICAL SURFACES OF THE RECESS WITH MATERIAL SPEC. 721-03, EPOXY POLYSULFIDE GROUT, OR MATERIAL SPEC. 705-22, PORTLAND CEMENT MORTAR BONDING GROUT. THE COST OF FURNISHING AND PLACING THE MATERIAL SHALL BE INCLUDED IN THE PRICE BID FOR ITEM 18555.9805M.
 2. SECTION A-A IS LOCATED ON DWG. GB-5.
 3. SECTIONS C-C, D-D AND E-E ARE LOCATED ON DWG. GB-6
 4. FOR GENERAL MAC JOINT DETAILS, SEE DWG. JT-3.
 5. FOR PROPOSED MAC JOINT SIZE AND ITEM NUMBER FOR EACH JOINT, SEE JOINT TABLE ON DWGS. JT-1-2.
 6. FOR DETAILS OF THE ABUTMENT JOINTS, SEE DWG. GB-4.

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED			
<u>AS BUILT REVISIONS</u>			
_____ SIGNATURE		_____ DATE	
I-481 OVER I-90			
PROPOSED PIER JOINT PLAN VIEWS			
STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION			
FILENAME	REGION	DATE	DRAWING NO.
380406GB.J1A	3	12/99	GB-3

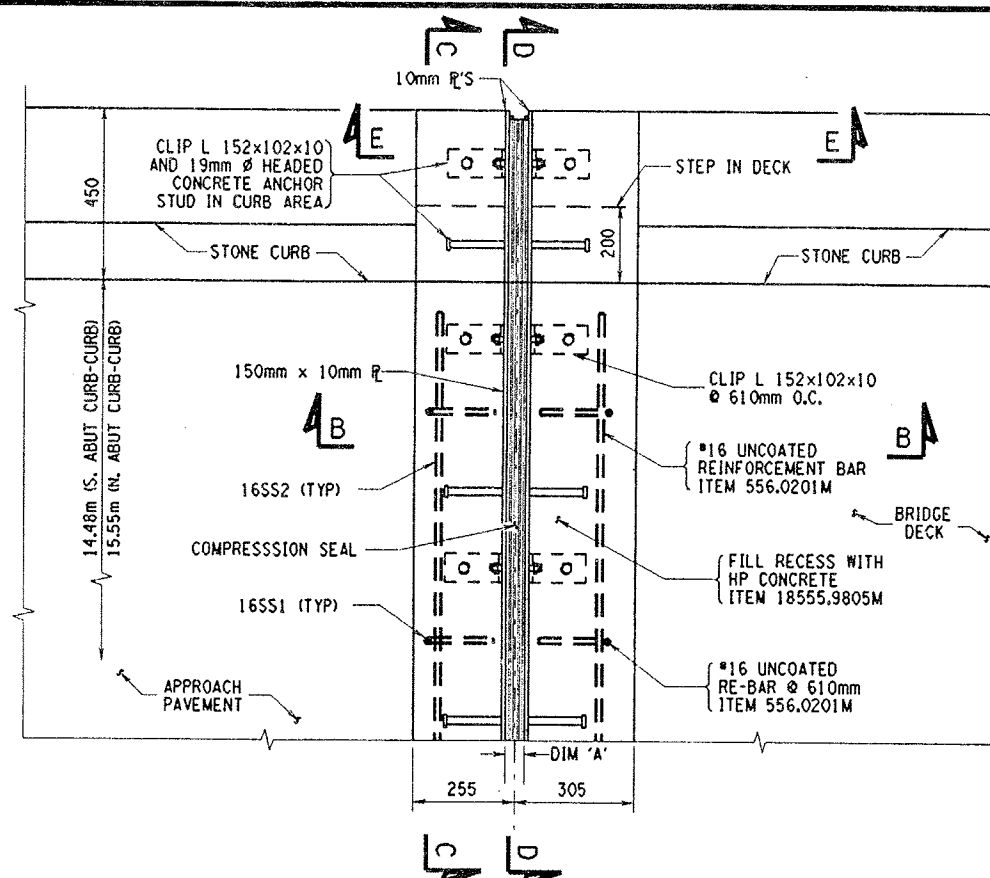
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DRAFTED BY
ESTIMATED BY
DESIGNED BY
JCB MANAGER
DESIGN SUPERVISOR



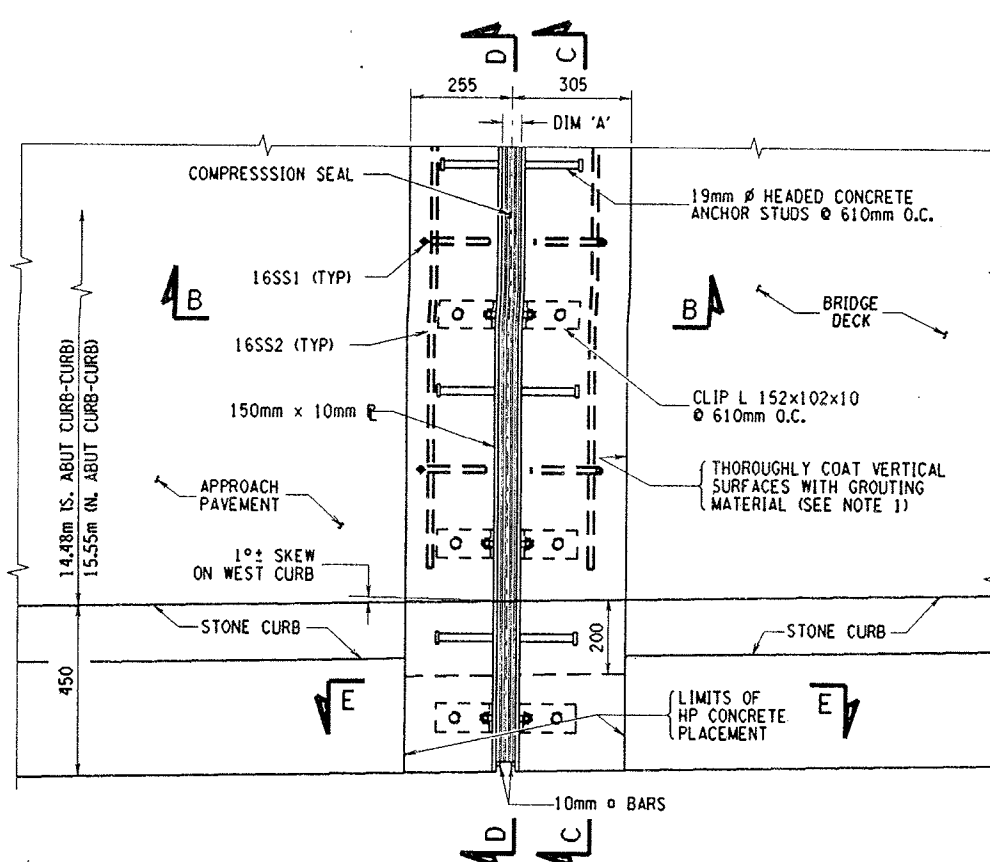
DIRECTION OF TRAFFIC →



PROPOSED ABUTMENT JOINT PLAN VIEW
BIN 1093682 - BOTH ABUTS
S. ABUT SHOWN, N. ABUT OPPOSITE
SCALE: 1 TO 10



DIRECTION OF TRAFFIC ←



PROPOSED ABUTMENT JOINT PLAN VIEW
BIN 1093681 - BOTH ABUTS
S. ABUT SHOWN, N. ABUT OPPOSITE
SCALE: 1 TO 10

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D258367	114	354
INTERSTATE BRIDGE DECK OVERLAY PROJECT				
VARIOUS BRIDGES ON I-690, I-81 AND I-481				
ONONDAGA AND OSWEGO COUNTIES				
P.I.N. 3804.06		B.I.N. 1093681 & 2		

NOTES:

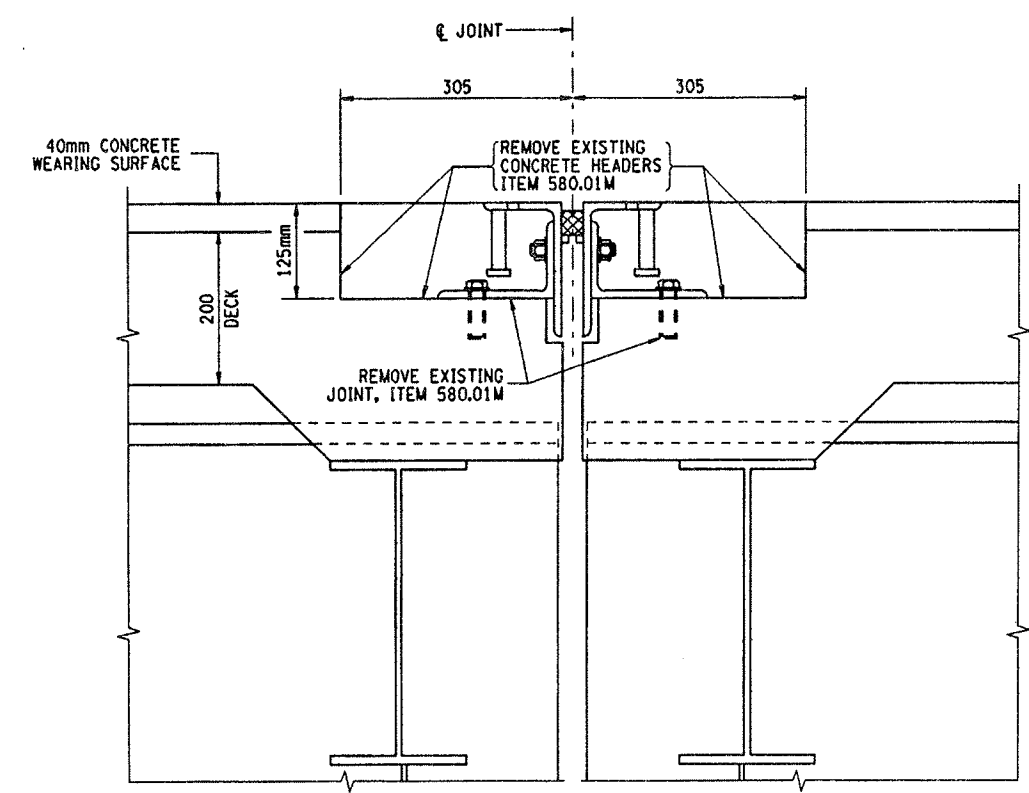
1. THOROUGHLY COAT THE BOTTOM AND VERTICAL SURFACES OF THE RECESS WITH MATERIAL SPEC. 721-03, EPOXY POLYSULFIDE GROUT, OR MATERIAL SPEC. 705-22, PORTLAND CEMENT MORTAR BONDING GROUT. THE COST OF FURNISHING AND PLACING THE MATERIAL SHALL BE INCLUDED IN THE PRICE BID FOR ITEM 18555.9805M.
2. SECTION B-B IS LOCATED ON DWG. GB-5.
3. SECTIONS C-C, D-D AND E-E ARE LOCATED ON DWG. GB-6.
4. FOR GENERAL MAC JOINT DETAILS, SEE DWG. JT-3.
5. FOR PROPOSED MAC JOINT SIZE AND ITEM NUMBER FOR EACH JOINT, SEE JOINT TABLE ON DWGS. JT-1-2.
6. FOR DETAILS OF THE PIER JOINTS, SEE DWG. GB-3.

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED
AS BUILT REVISIONS

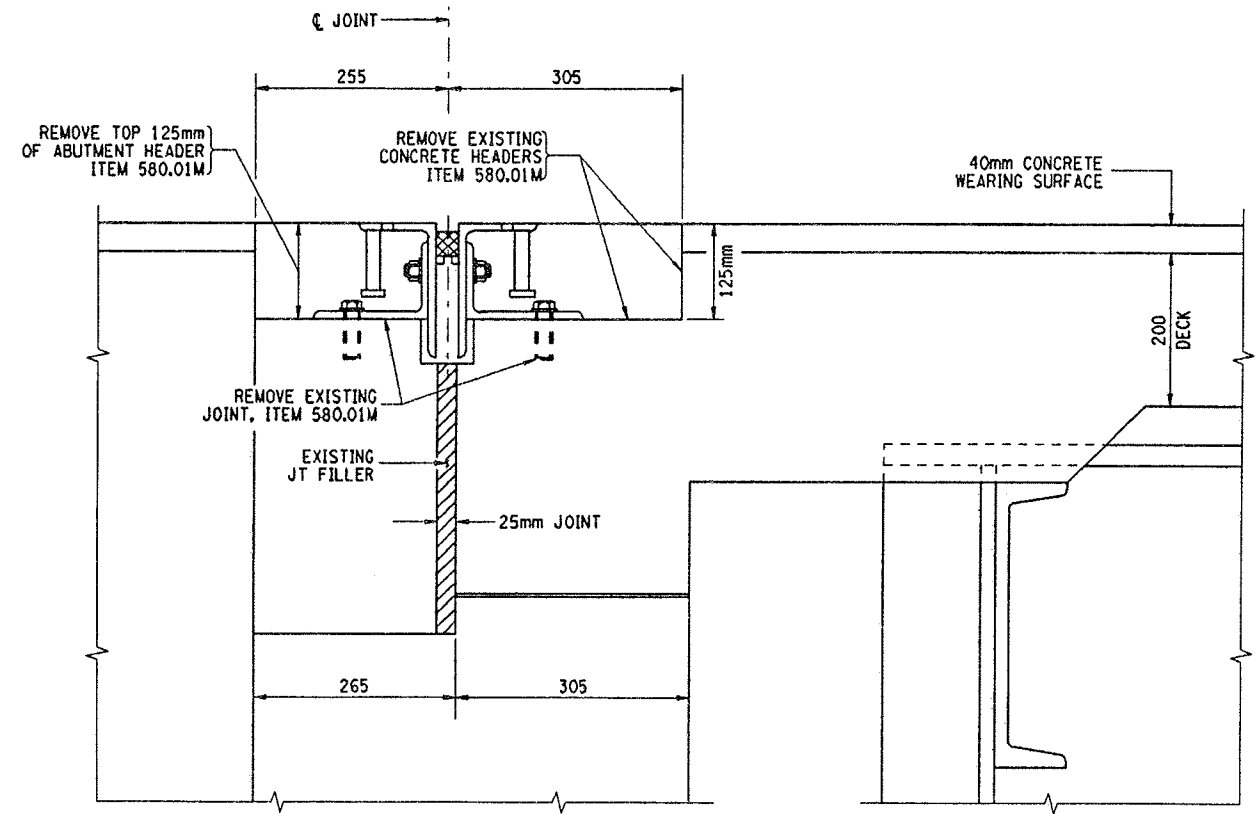
ALL DIMENSIONS ARE IN INCH UNLESS OTHERWISE NOTED			
AS BUILT REVISIONS			
SIGNATURE		DATE	
I-481 OVER I-90			
PROPOSED ABUTMENT JOINT PLAN VIEWS			
STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION			
FILENAME 380406GB.J1A	REGION 3	DATE 12/99	DRAWING NO. GB-4

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ESTIMATED BY
CHECKED BY
DESIGNED BY
JOB MANAGER
DESIGN SUPERVISOR
USER = ICHNISENAME

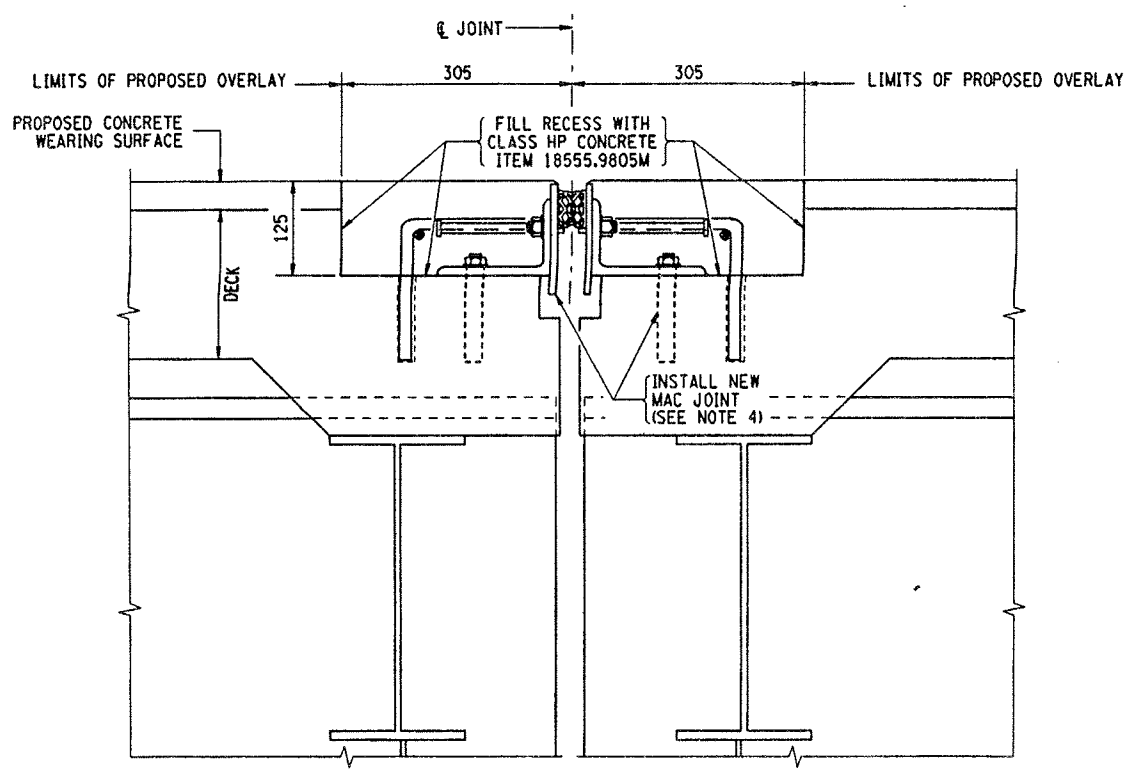
FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D258367	115	354
INTERSTATE BRIDGE DECK OVERLAY PROJECT				
VARIOUS BRIDGES ON I-690, I-81 AND I-481				
ONONDAGA AND OSWEGO COUNTIES				
P.I.N. 3804.06		B.I.N. 1093681 & 2		



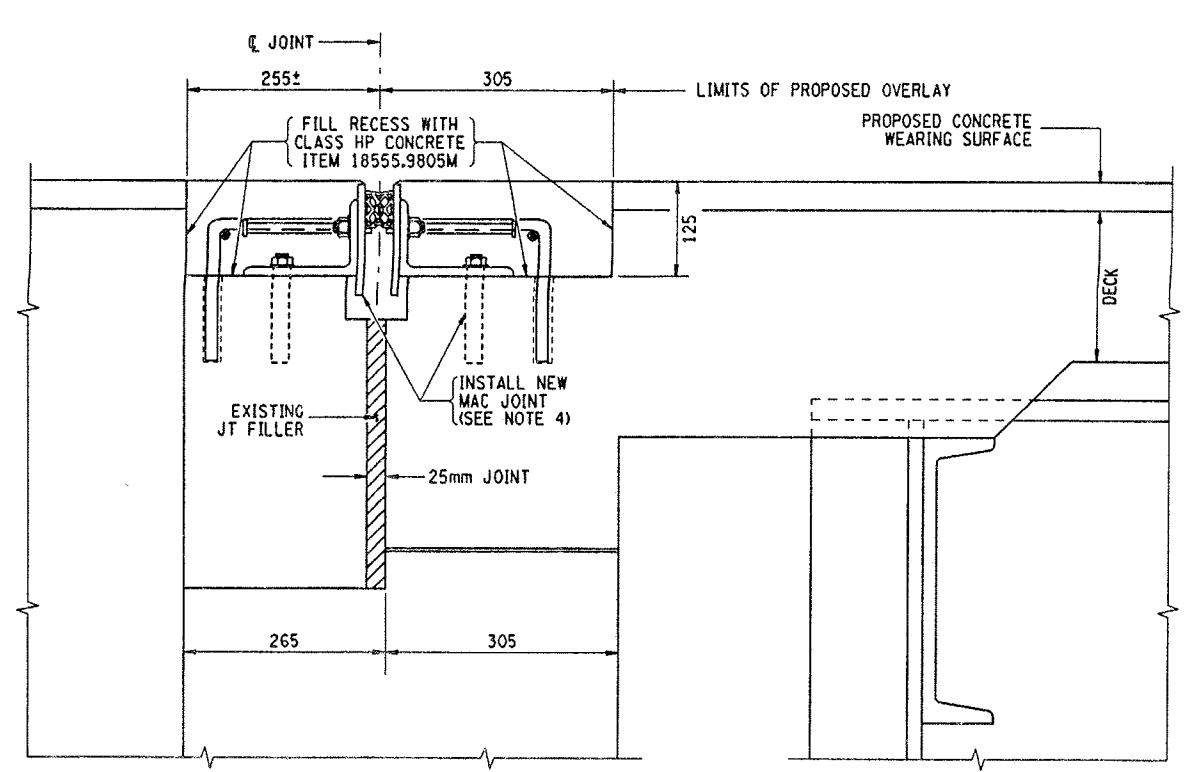
EXISTING SECTION A-A
BIN 1093681 - PIER 1
BIN 1093682 - PIER 2
SCALE: 1 TO 5



EXISTING SECTION B-B
BIN 1093681 - BOTH ABUTS
BIN 1093682 - BOTH ABUTS
SCALE: 1 TO 5



PROPOSED SECTION A-A
BIN 1093681 - PIER 1
BIN 1093682 - PIER 2
SCALE: 1 TO 5



PROPOSED SECTION B-B
BIN 1093681 - BOTH ABUTS
BIN 1093682 - BOTH ABUTS
SCALE: 1 TO 5

NOTES:

1. THOROUGHLY COAT THE BOTTOM AND VERTICAL SURFACES OF THE RECESS WITH MATERIAL SPEC. 721-03, EPOXY POLYSULFIDE GROUT, OR MATERIAL SPEC. 705-22, PORTLAND CEMENT MORTAR BONDING GROUT. THE COST OF FURNISHING AND PLACING THE MATERIAL SHALL BE INCLUDED IN THE PRICE BID FOR ITEM 18555.9805M.
2. SEE DWG. GB-4 FOR LOCATION OF SECTIONS A-A AND B-B.
3. FOR GENERAL MAC JOINT DETAILS SEE DWG. JT-3.
4. FOR PROPOSED MAC JOINT SIZE AND ITEM NUMBER FOR EACH JOINT, SEE JOINT TABLE ON DWGS. JT- 1-2.

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED
AS BUILT REVISIONS

SIGNATURE DATE

I-481 OVER I-90

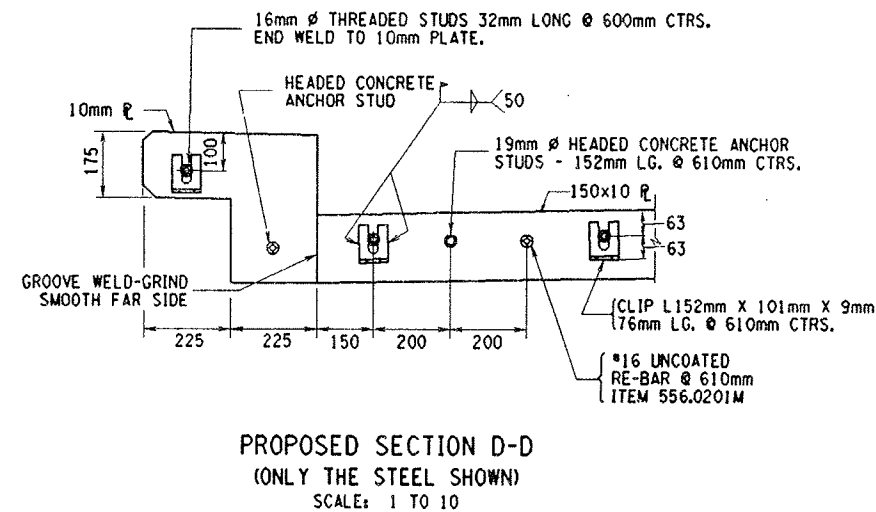
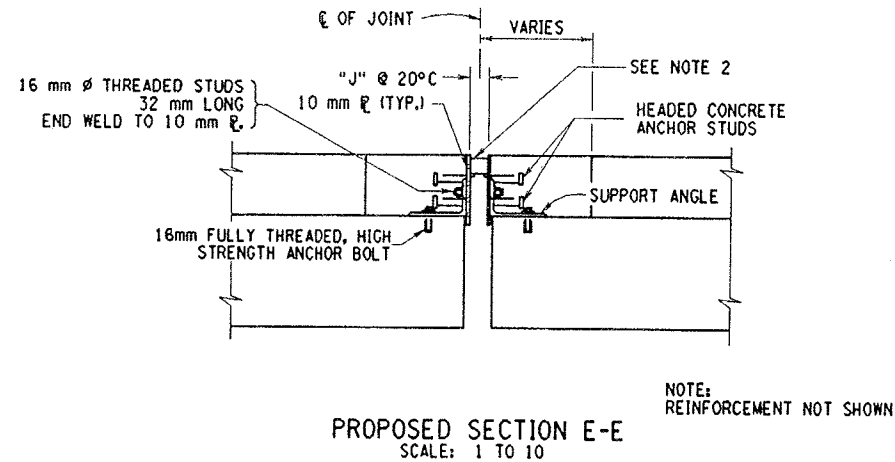
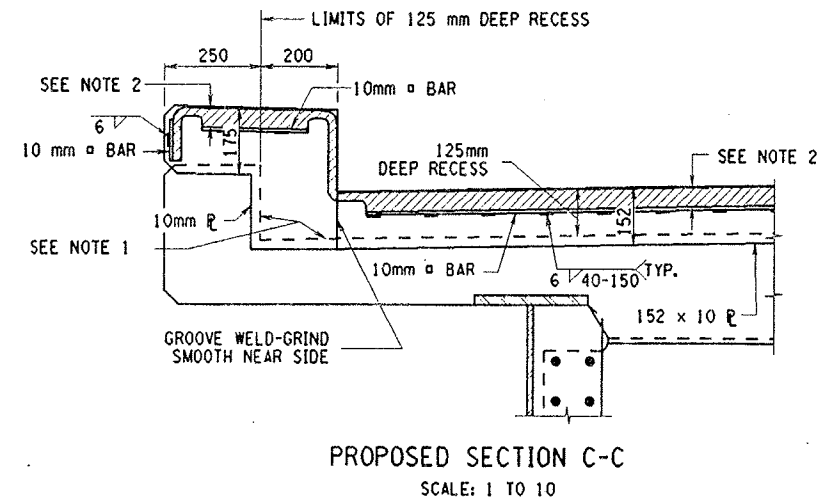
EXISTING AND PROPOSED CROSS SECTIONS

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME	REGION	DATE	DRAWING NO.
380406GB.J1A	3	1/00	GB-5

CHECKED BY
DRAFTED BY
ESTIMATED BY
CHECKED BY
DESIGNED BY
JOB MANAGER
DESIGN SUPERVISOR

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D258367	116	354
INTERSTATE BRIDGE DECK OVERLAY PROJECT				
VARIOUS BRIDGES ON I-690, I-81 AND I-481				
ONONDAGA AND OSWEGO COUNTIES				
P.J.N. 3804.06		B.I.N. 1093681 & 2		



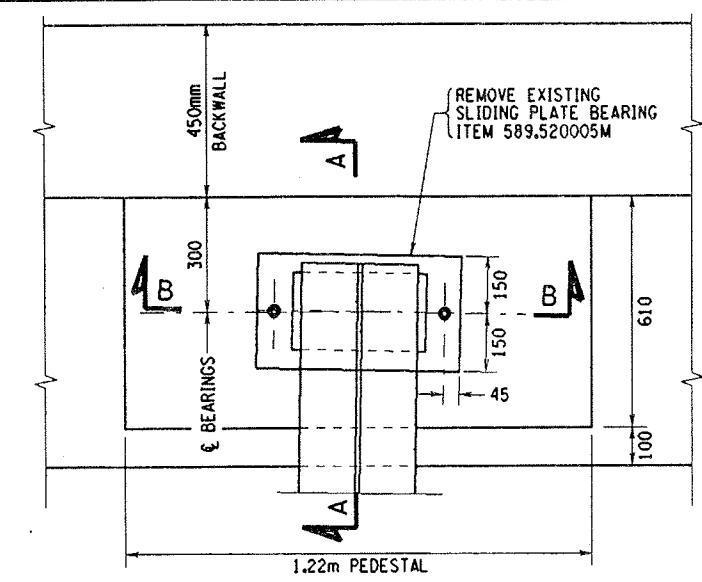
- NOTES:
1. THOROUGHLY COAT THE BOTTOM AND VERTICAL SURFACES OF THE RECESS WITH MATERIAL SPEC. 721-03, EPOXY POLYSULFIDE GROUT, OR MATERIAL SPEC. 705-22, PORTLAND CEMENT MORTAR BONDING GROUT. THE COST OF FURNISHING AND PLACING THE MATERIAL SHALL BE INCLUDED IN THE PRICE BID FOR ITEM 18555.9805M.
 2. THIS DEPTH SHALL BE INDICATED ON THE SHOP DRAWINGS AND SHALL BE SUCH THAT WHEN THE SEAL IS COMPRESSED TO 50% OF ITS NORMAL WIDTH, THE TOP OF THE SEAL SHALL BE NOT LESS THAN 6mm NOR MORE THAN 19mm BELOW THE TOP OF THE ROADWAY.
 3. FOR LOCATIONS OF SECTIONS C-C, D-D AND E-E, SEE DWG. GB-3,4.
 4. FOR GENERAL MAC JOINT DETAILS, SEE DWG. JT-3.
 5. FOR PROPOSED MAC JOINT SIZE AND ITEM NUMBER FOR EACH JOINT, SEE JOINT TABLE ON DWGS. JT-1-2.

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED			
AS BUILT REVISIONS			
SIGNATURE		DATE	
I-481 OVER I-90			
PROPOSED JOINT DETAILS FASCIA SECTIONS			
STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION			
FILENAME 380406GB.J1A	REGION 3	DATE 12/99	DRAWING NO. GB-6

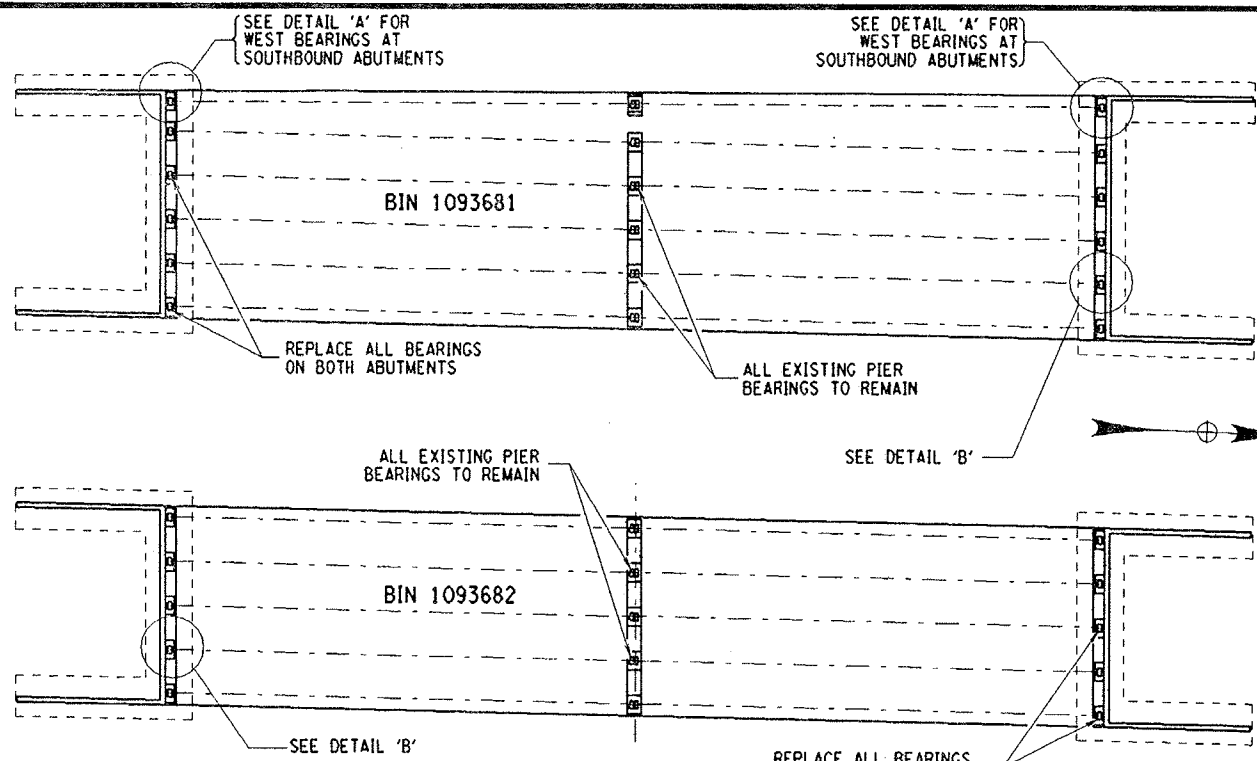
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ESTIMATED BY
CHECKED BY
DESIGNED BY
JOB MANAGER
DESIGN SUPERVISOR
USER = gshuba

FED. ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D258367	117	354
INTERSTATE BRIDGE DECK REPAIR PROJECT				
VARIOUS BRIDGES ON I-690, I-81 AND I-481				
ONONDAGA AND OSWEGO COUNTIES				
P.I.N. 3804.06		B.I.N. 1093681 & 2		

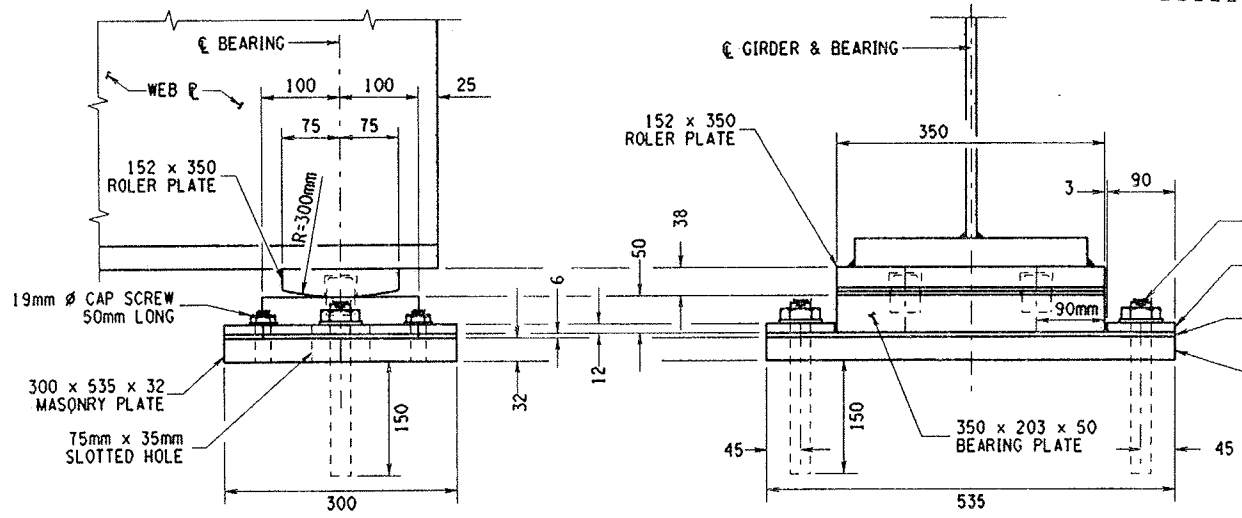
- NOTES:
1. REMOVE PAINT FROM ALL SPECIFIED PARTS BEFORE REMOVING ANY WELD. PAINT SHALL BE REMOVED TO 100mm (MIN) FROM THE WELDS, ITEM 16570.72M.
 2. THE PREFERRED METHOD OF WELD REMOVAL IS AIR-ARC GOUGE.
 3. ONCE THE NEW BEARINGS HAVE BEEN INSTALLED, ALL EXPOSED AREAS ON THE GIRDER SHALL BE RE-PAINTED, ITEM 16570.32M.
 4. IN CONJUNCTION WITH THE USE OF ITEM 16570.72M - LOCALIZED VACUUM CONTAINED CLEANING STRUCT. STEEL, ITEM 18574.101007M OR ITEM 18574.101008M - CLASS B, CONTAINMENT SYSTEM AND ITEM 571.010007M OR ITEM 571.010008M- TREATMENT & DISPOSAL OF PAINT REMOVAL WASTE, SHALL ALSO BE INCORPORATED DURING THE PAINT REMOVAL OPERATION.
 5. ALL BEARING REPLACEMENT WORK SHALL INCLUDE STRUCTURAL LIFTING, TYPE A, ITEM 580.01M.



DETAIL 'A'
WEST BEARINGS AT SB. ABUTMENTS
SCALE: 1 TO 10

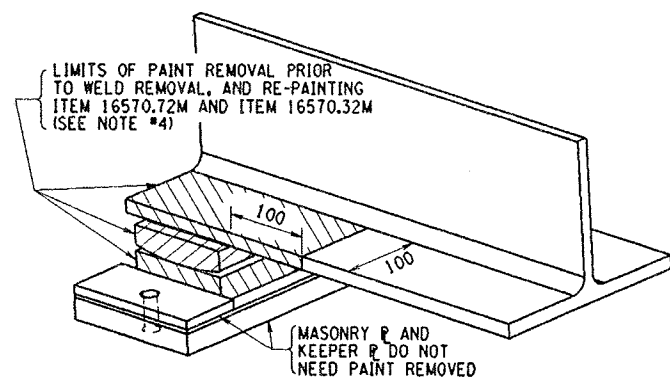


BRIDGE PLAN SCHEMATIC
SCALE: 1 TO 250

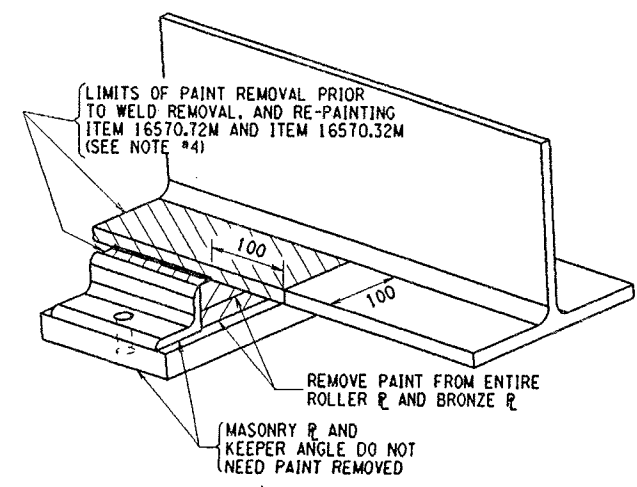


SECTION A-A
SCALE: 1 TO 5

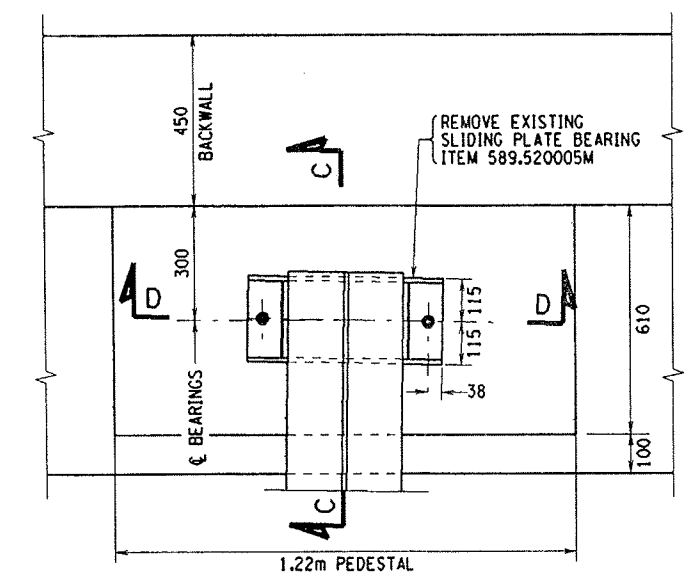
SECTION B-B
SCALE: 1 TO 5



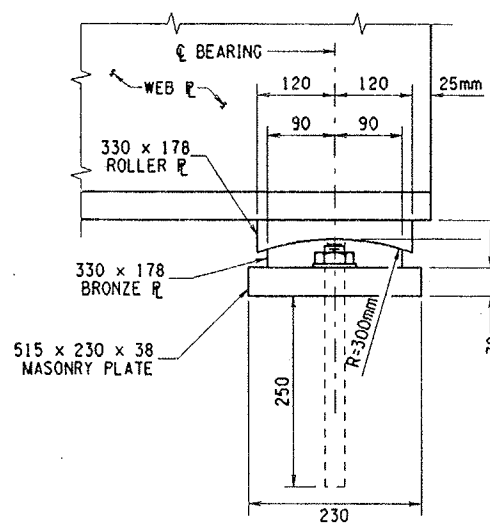
PAINT REMOVAL DETAIL
WEST BEARINGS AT SB. ABUTMENTS
SCALE: 1 TO 5



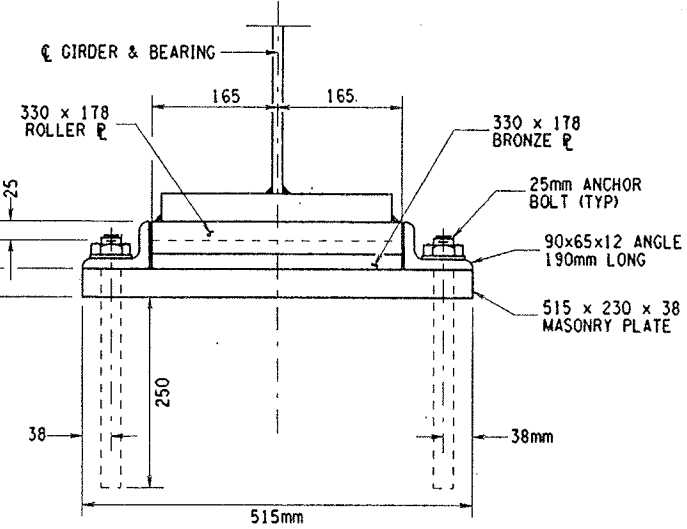
PAINT REMOVAL DETAIL
ALL BEARING EXCEPT WEST
BEARINGS AT SB. ABUTMENTS
SCALE: 1 TO 5



DETAIL 'B'
ALL BEARING EXCEPT WEST
BEARINGS AT SB. ABUTMENTS
SCALE: 1 TO 10



SECTION C-C
SCALE: 1 TO 5



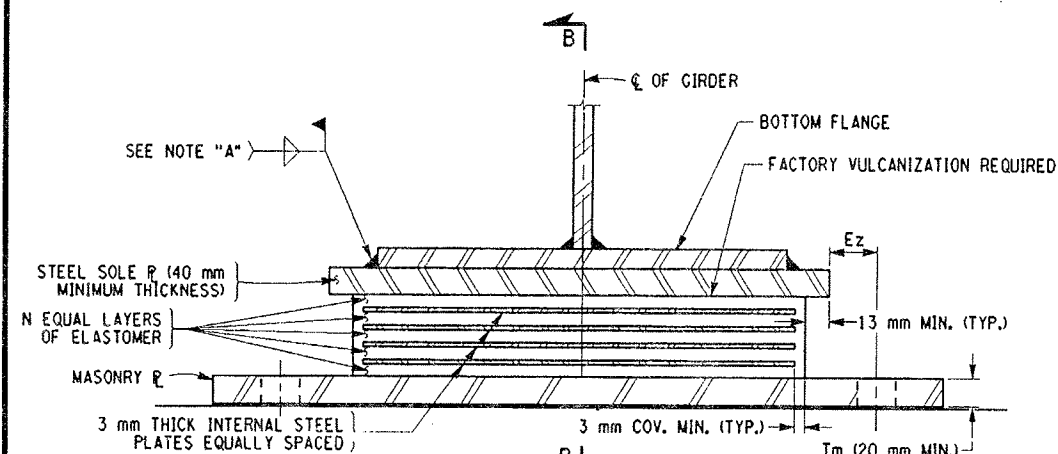
SECTION D-D
SCALE: 1 TO 5

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED
AS BUILT REVISIONS

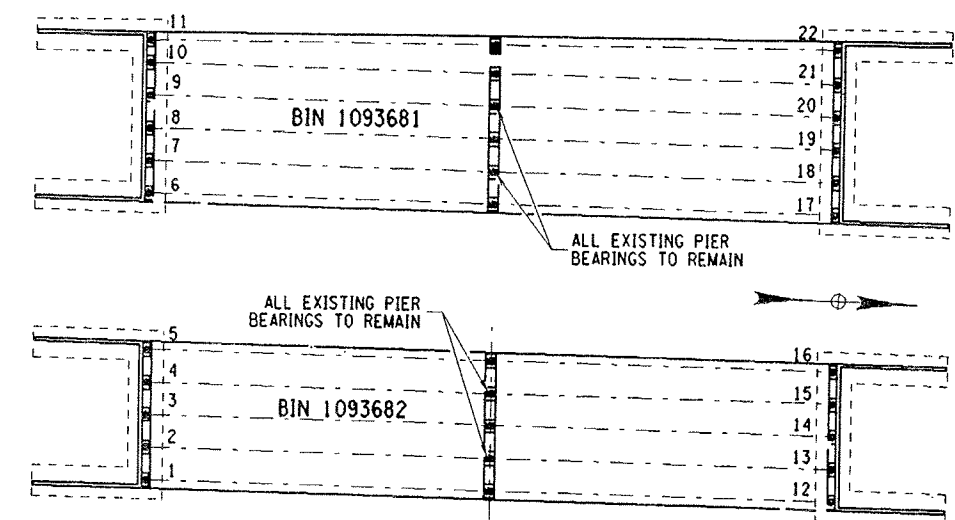
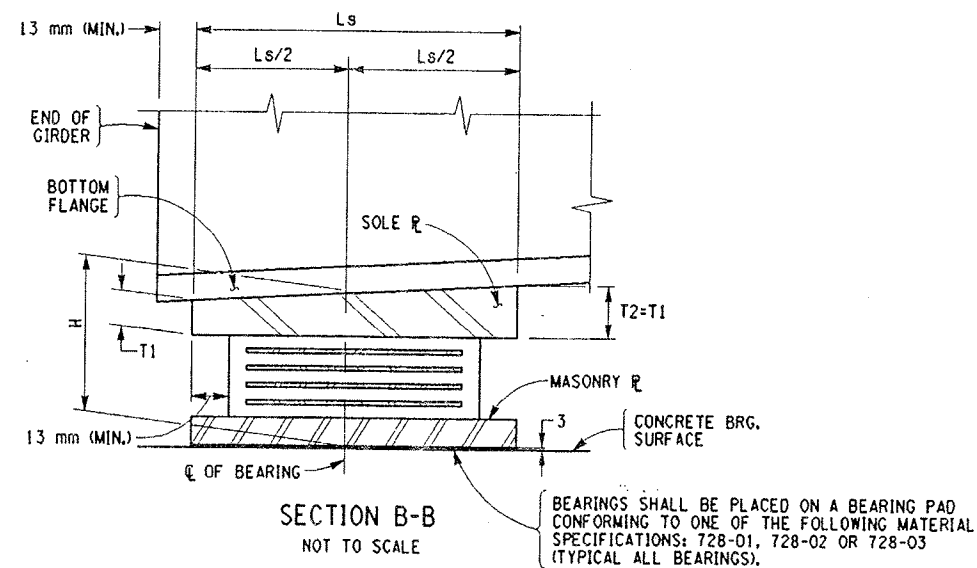
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1-481 OVER 1-90

EXISTING BEARING DETAILS

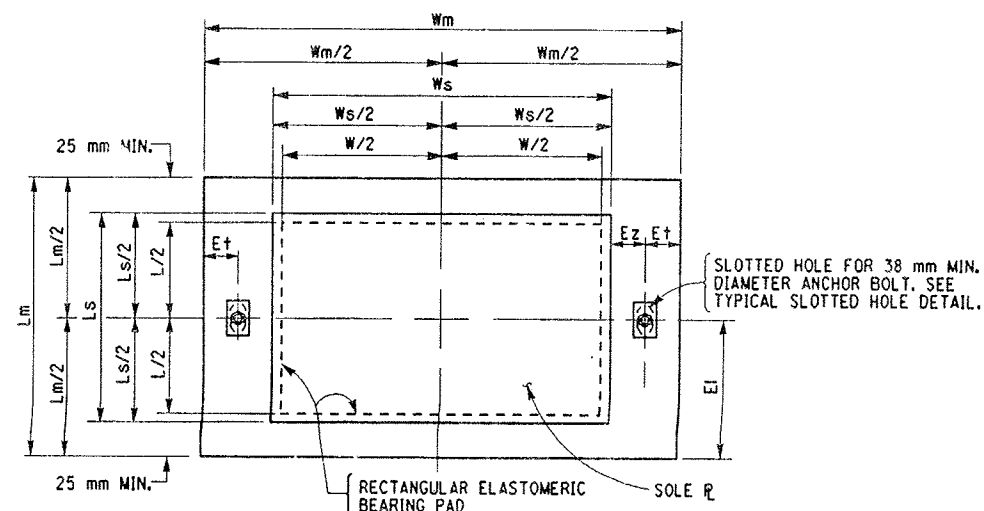
STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION			
FILENAME 380406GB.S1A	REGION 3	DATE 12/99	DRAWING NO. GB-7



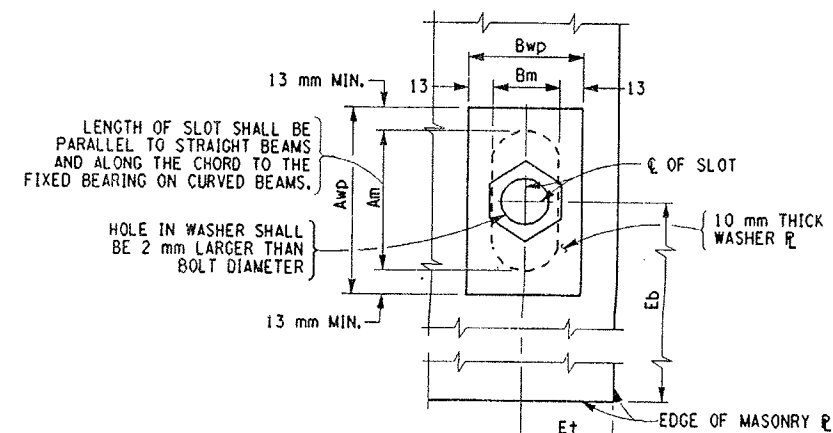
TYPICAL EXPANSION BEARING ELEVATION
NOT TO SCALE



BRIDGE PLAN SCHEMATIC
NO SCALE



TYPICAL RECTANGULAR EXPANSION BEARING
PLAN
NOT TO SCALE



TYPICAL SLOTTED HOLE DETAIL
MASONRY PLATE
NOT TO SCALE

NOTES:

INSTALLATION ALIGNMENT:
THE MAXIMUM VARIATION FROM PERFECT ALIGNMENT UNDER FULL DEAD
LOAD SHALL NOT EXCEED 4 mm. THIS VARIATION SHALL BE MEASURED AS
THE HORIZONTAL DISTANCE BETWEEN THE CENTERLINE OF THE HIGHEST
ELASTOMER SURFACE AND THE CENTERLINE OF THE LOWEST ELASTOMER
SURFACE.

CONCRETE SURFACES UNDER THE BEARINGS SHALL CONFORM TO SUBSECTION 565-3.02 "CONCRETE BEARING SURFACE PREPARATION" OF THE NEW YORK STATE STANDARD SPECIFICATIONS, CONSTRUCTION AND MATERIALS.

ALL STEEL EXCEPT INTERNAL STEEL PLATES SHALL CONFORM TO ASTM A588M, $F_y = 345 \text{ MPa}$, UNLESS OTHERWISE NOTED.

THE BEARINGS SHALL MEET THE REQUIREMENTS OF STANDARD SPECIFICATION SECTION 565 UNLESS OTHERWISE NOTED.

ANCHOR BOLTS, WASHERS, WASHER PLATES AND NUTS SHALL MEET THE REQUIREMENTS OF SUBSECTION 723-60. THEIR COST, INCLUDING GALVANIZING, SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE BEARING ITEM.

ALL DIMENSIONS ARE SHOWN IN MILLIMETERS UNLESS OTHERWISE NOTED.

EXPANSION ELASTOMERIC BEARING (TYPE E.B.) TABLE

LOCATION	ITEM NO.	QUANTITY REQUIRED	DL+SDL (KN)	LL W/O IMP. (KN)	TOTAL DESIGN REACTION (KN)	SHAPE FACTOR	ELASTOMER LAYERS					h _r + (mm)	COMP. AREA (sq. mm)	SHEAR AREA (sq. mm)	MASONRY PLATE						ANCHOR BOLTS		WELD SIZE	NUMBER OF CAP SCREWS	WASHER P.		SOLE PLATE				BR	
							THK/LAYER N	LAYERS	L	W	D				T _m	W _m	L _m	E _t	E _i	A _m	B _m	Ø			BOLTS/BRG.	A _{wp}	B _{wp}	W _s	L _s	T ₁		T ₂
1 - 10	565.2002M	10	327.5	222.7	550.2	8.2	12mm	4	350	450	---	48	152735	157500	25	725	405	75	110	80	50	38	2	8	--	105	75	485	380	40	40	12
11. 22	565.2002M	2	327.5	222.7	550.2	8.2	12mm	4	350	450	---	48	152735	157500	35	725	405	75	110	80	50	38	2	8	--	105	75	485	380	40	40	12
12 - 21	565.2002M	10	327.5	222.7	550.2	8.2	12mm	4	350	450	---	48	152735	157500	25	725	405	75	110	80	50	38	2	8	--	105	75	485	380	40	40	12

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED
AS BUILT REVISIONS

SIGNATURE _____ DATE _____

J-481 OVER J-90

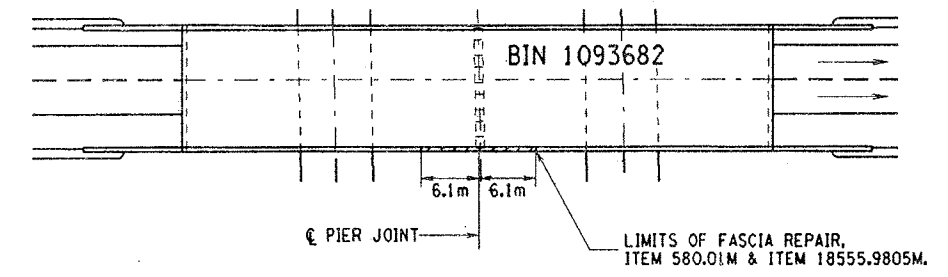
PROPOSED ELASTOMERIC BEARING DETAILS

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME	REGION	DATE	DRAWING NO.
380406GB.SIA	3	12/99	GB-8

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D258367	119	354
INTERSTATE BRIDGE DECK REPAIR PROJECT				
VARIOUS BRIDGES ON I-690, I-81 AND I-481				
ONONDAGA AND OSWEGO COUNTIES				
P.I.N. 3804.06		B.I.N. 1093681 & 2		

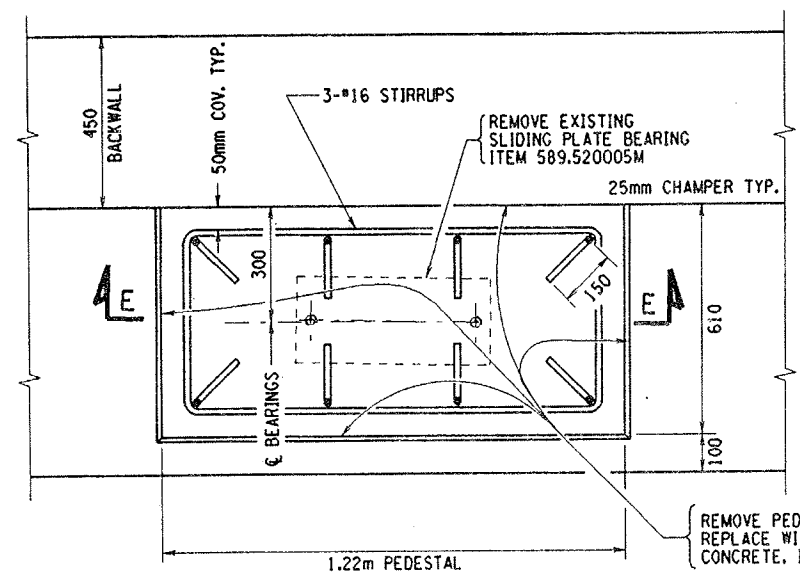
THE ONLY FASCIA REPAIR LOCATION IS ON THE EAST SIDE OF BIN 1093682.



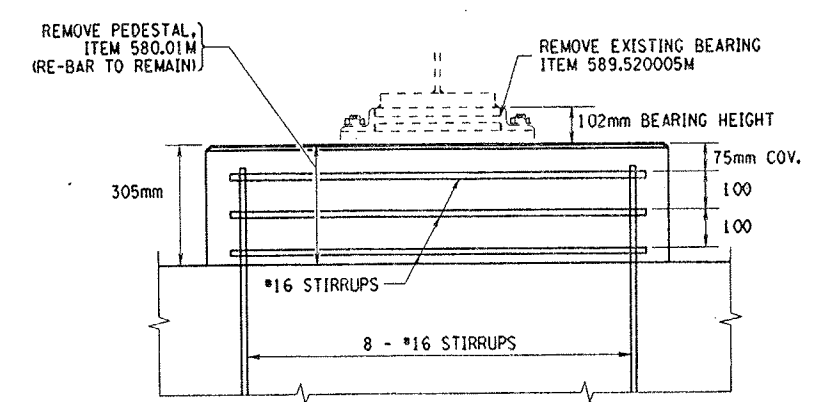
FASCIA REPAIR LOCATION PLAN
BIN 1093682
NOT TO SCALE

- NOTES:
1. ALL ABUTMENT PEDESTALS ON BOTH BRIDGES (NB & SB) ARE TO BE REMOVED AND REPLACED TO DIMENSIONS SHOWN, ABOVE. NOTE THAT THE PROPOSED BEARINGS HAVING A 124mm HEIGHT VERSUS THE EXISTING BEARING HEIGHT OF 102mm.
 2. NO PEDESTAL OR PIER WORK IS REQUIRED AT THE PIERS.
 3. EXISTING REINFORCEMENT TO REMAIN.
 4. ALL PEDESTAL REPLACEMENT WORK SHALL INCLUDE STRUCTURAL LIFTING, TYPE A, ITEM 585.01M.

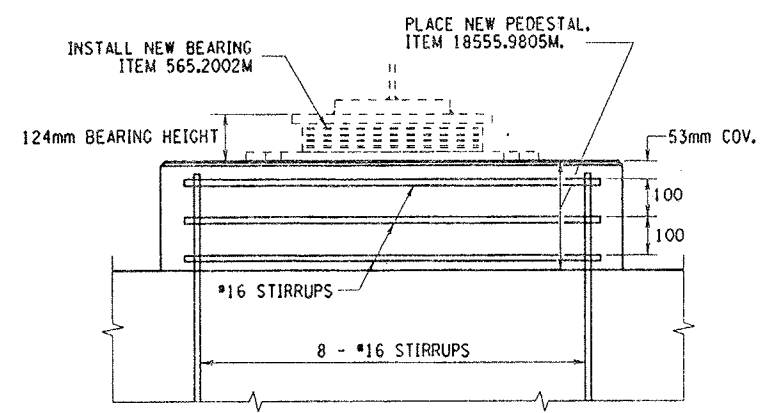
Record plans were reviewed on 12-30-13 by GA. No suspect asbestos materials were identified.



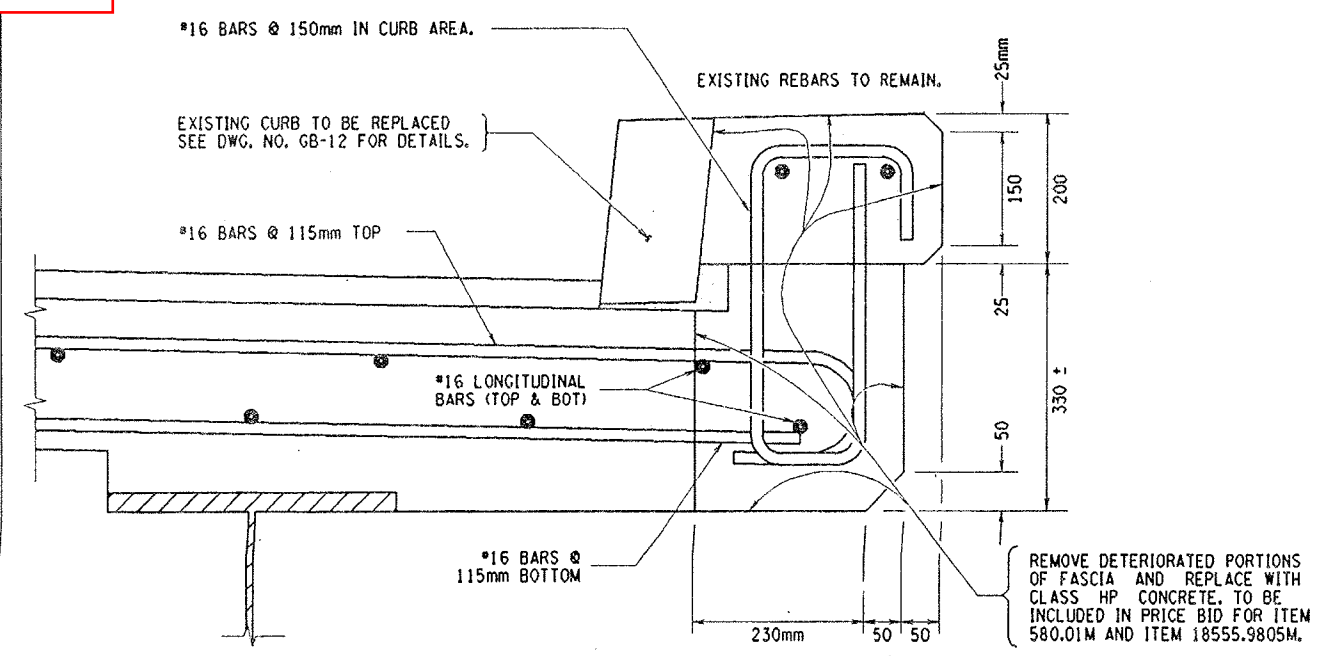
PEDESTAL PLAN VIEW
SCALE: 1 TO 10



EXISTING SECTION E-E
INTERIOR PEDESTAL
SCALE: 1 TO 10

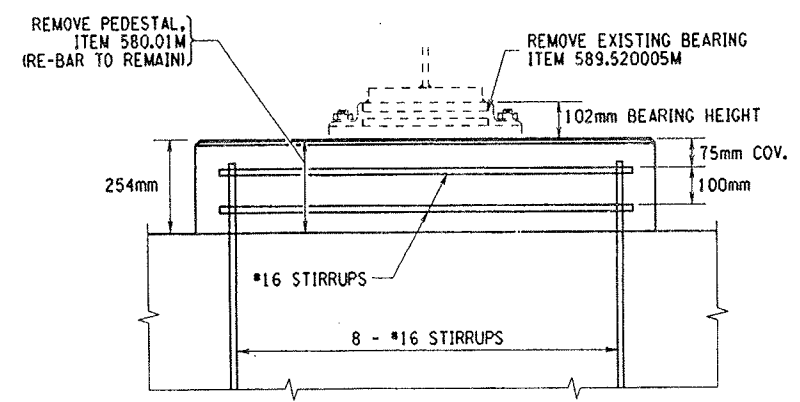


PROPOSED SECTION E-E
INTERIOR PEDESTAL
SCALE: 1 TO 10

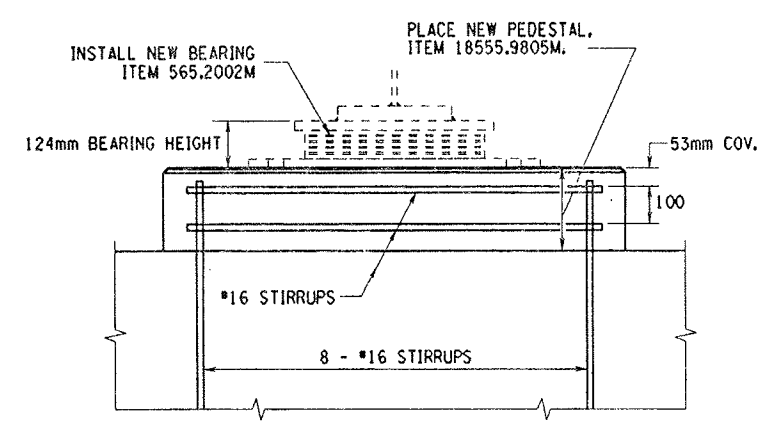


FASCIA REPAIR DETAIL
BIN 1093682
SCALE: 1 TO 5

- FASCIA REPAIR NOTES:
1. FASCIA CONCRETE REMOVAL SHALL BE AS SHOWN ON THIS DRAWING OR UNTIL SOUND CONCRETE IS ENCOUNTERED AS DIRECTED BY ENGINEER.
 2. EXISTING REINFORCEMENT TO REMAIN.
 3. NOTE THAT THE EXISTING BRIDGE RAIL IS BEING UP-GRADED DURING THIS CONTRACT, SEE DWG. NO. GB-10.
 4. SAWCUT FASCIA CONCRETE TO PRODUCE NEAT REMOVAL LINES, AS DIRECTED BY ENGINEER, TO BE INCLUDED IN PRICE BID FOR ITEM 18555.9805M.



EXISTING SECTION E-E
FASCIA PEDESTAL
SCALE: 1 TO 10



PROPOSED SECTION E-E
FASCIA PEDESTAL
SCALE: 1 TO 10

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED

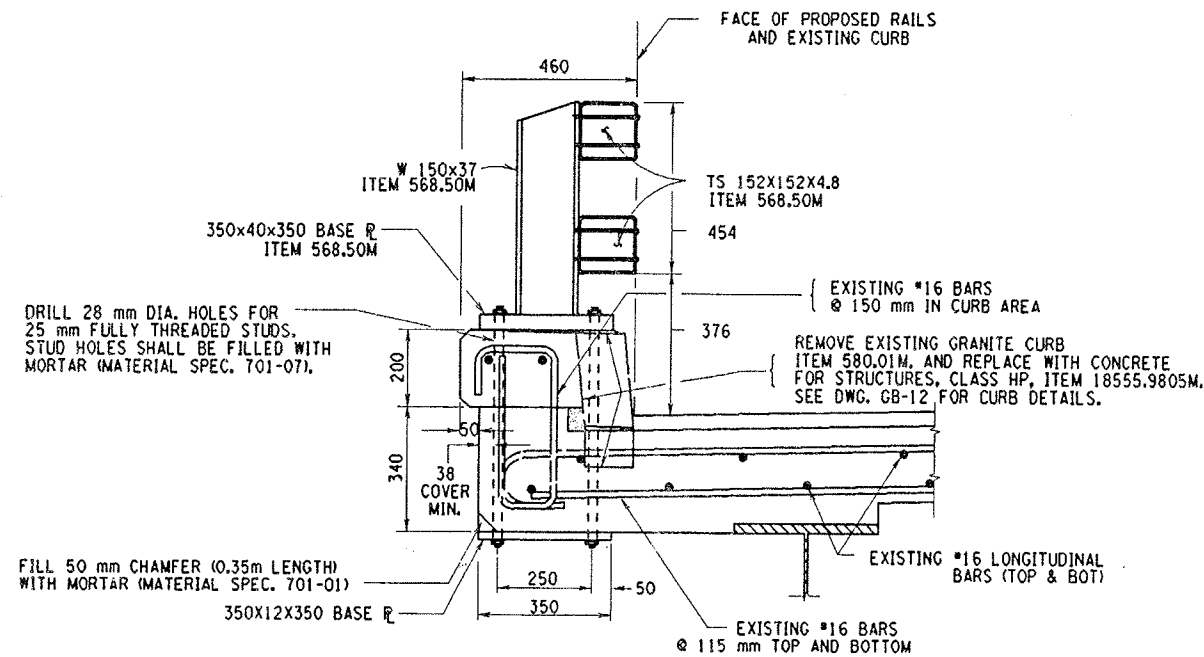
AS BUILT REVISIONS

SIGNATURE	DATE
I-481 OVER I-90	
PEDESTAL AND FASCIA REPAIRS DETAILS	
STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION	
FILENAME 380406GB.C1A	REGION 3
DATE 12/99	DRAWING NO. GB-9

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DESIGN SUPERVISOR
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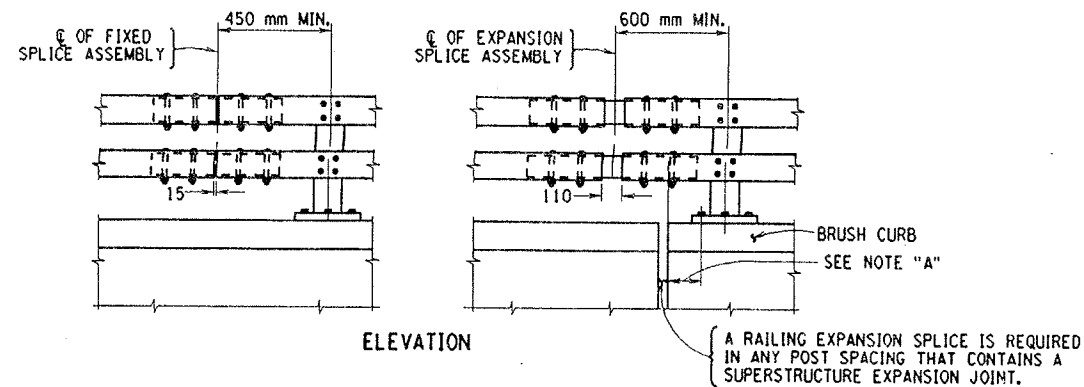
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JOB MANAGER
DESIGN SUPERVISOR

FED. ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D258367	120	354
INTERSTATE BRIDGE DECK OVERLAY PROJECT				
VARIOUS BRIDGES ON I-690, I-81 AND I-481				
ONONDAGA AND OSWEGO COUNTIES				
P.I.N. 3804.06		B.I.N. 1093681 & 2		



PROPOSED BRIDGE RAIL
SCALE 1:10

EXISTING BRIDGE RAIL TO BE REMOVED
FOR PROPOSED SNOW FENCE DETAILS SEE DWG.- XX

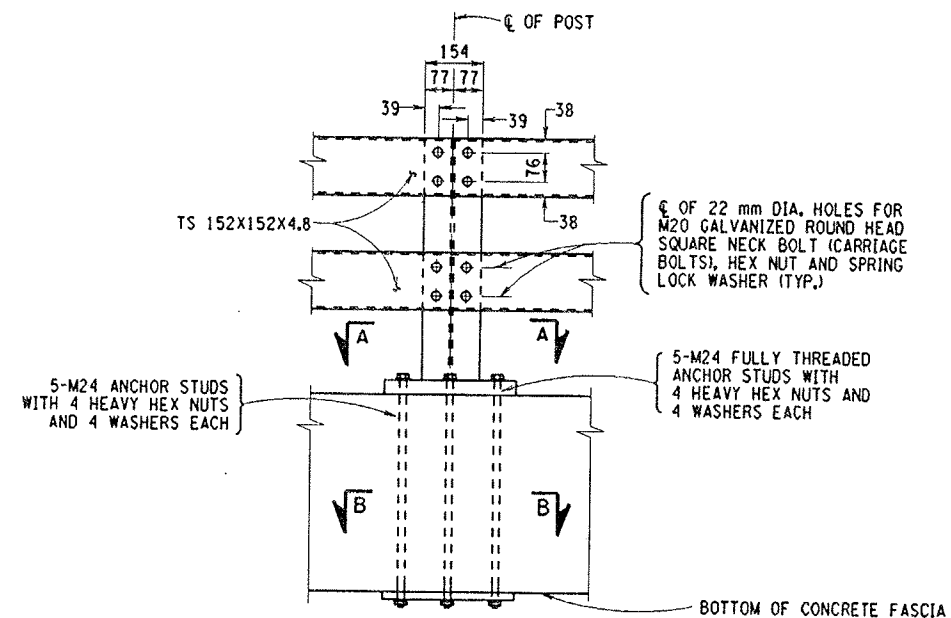


ELEVATION

STEEL BRIDGE RAILING SPLICE DETAILS

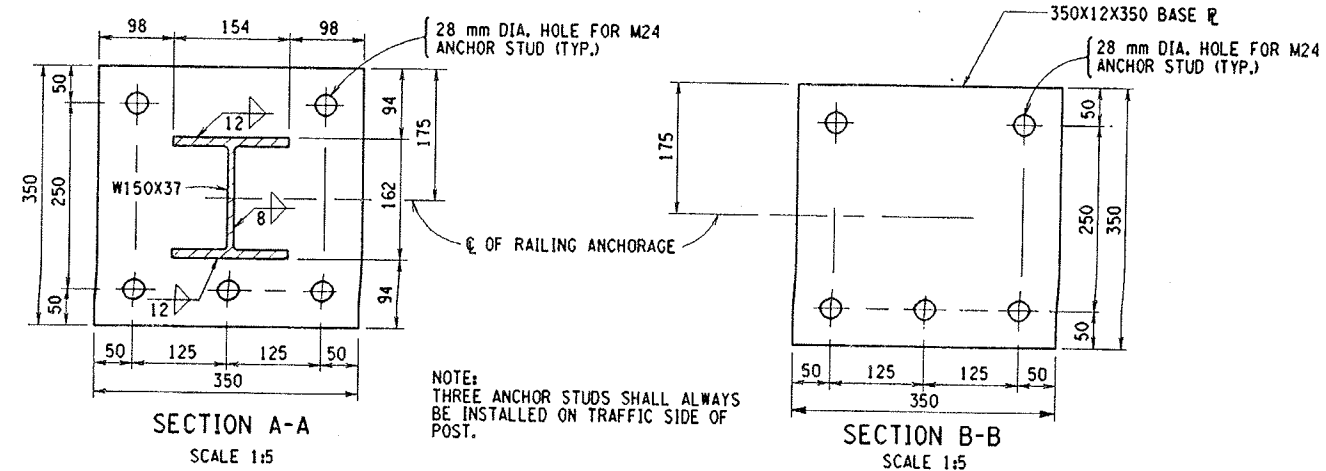
SCALE 1:20

NOTE "A":
THE MINIMUM DISTANCE FROM THE POST TO AN EXPANSION JOINT SHALL BE DETERMINED BY THE MINIMUM EDGE DISTANCE OF 125 mm FROM ANY ANCHOR STUD TO THE END OF THE SLAB, OR TO THE RECESS POUR FOR AN EXPANSION JOINT, IF THERE IS ONE.



TYPICAL ELEVATION

SCALE 1:10



SECTION A-A

SCALE 1:5

SECTION B-B

SCALE 1:5

NOTES:

- ALL RAILING IS TO BE FABRICATED AND ERECTED ACCORDING TO SECTION 568 OF THE STANDARD SPECIFICATIONS.
- PRIOR TO GALVANIZING THE ASSEMBLED POST, GRIND ALL EDGES TO A MINIMUM RADIUS OF 2 mm.
- BOLTS SHALL BE TORQUED SNUG TIGHT (APPROXIMATELY 135 N-m).
- THESE DETAILS APPLY TO THE BOTH FASCIAS OF BINS 1093681(2).
- THE EXISTING BRIDGE RAILING WAS INSTALLED UNDER CONTRACT FISH 70-7 AND IS BASED ON BOD 69-51.

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

SIGNATURE

DATE

I-481 OVER I-90

BRIDGE RAIL DETAILS

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME	REGION	DATE	DRAWING NO.
380406GB.R1A	3	12/99	GB-10

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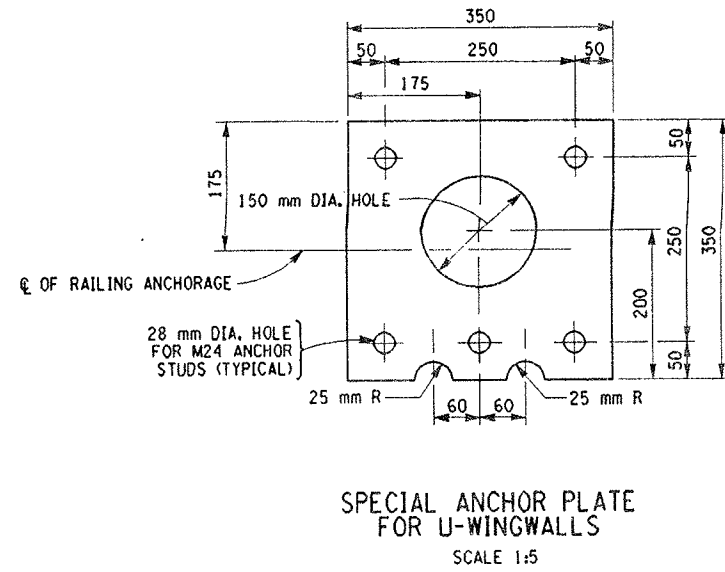
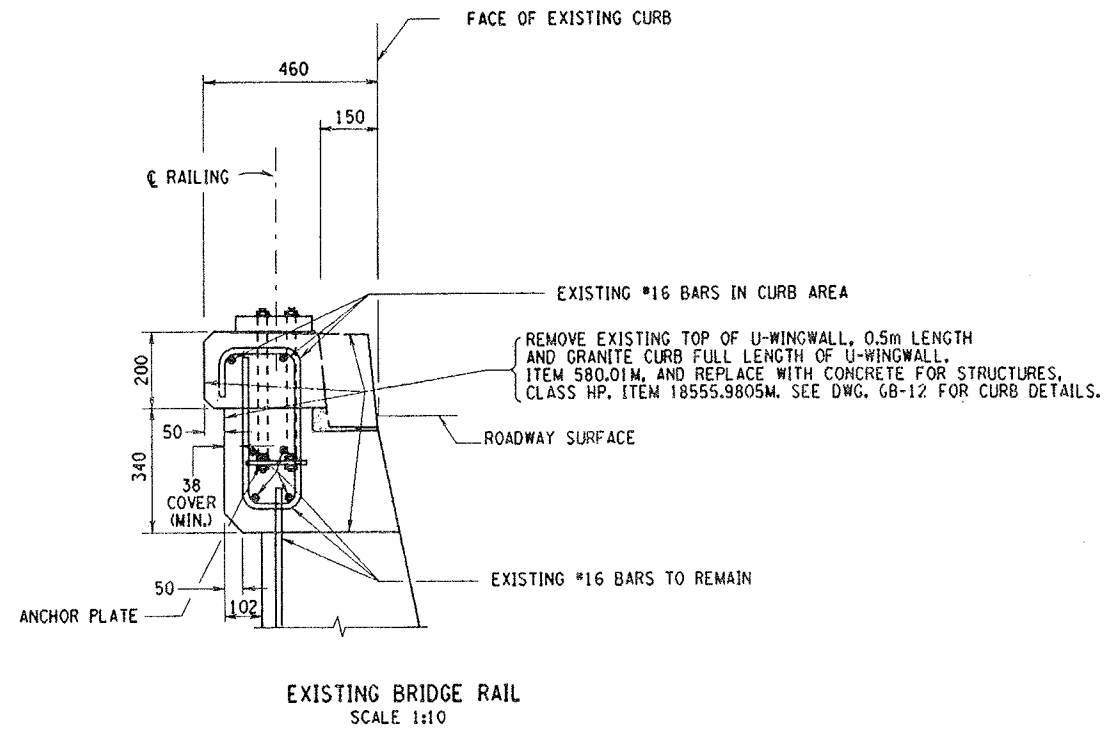
JOB MANAGER

DESIGN SUPERVISOR

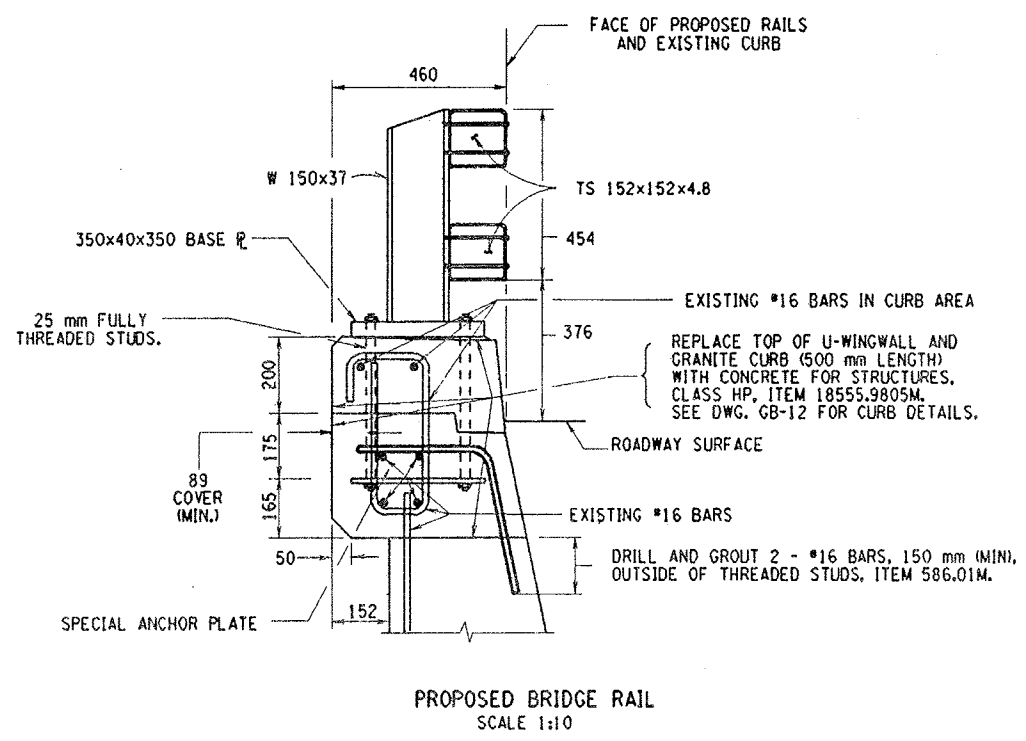
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FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D258367	121	354
INTERSTATE BRIDGE DECK OVERLAY PROJECT				
VARIOUS BRIDGES ON I-690, I-81 AND I-481				
ONONDAGA AND OSWEGO COUNTIES				
P.I.N. 3804.06				
B.I.N. 1093681 & 2				



NOTE:
NOTCHES ARE ON TRAFFIC SIDE OF
PLATE.



ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED
AS BUILT REVISIONS

SIGNATURE DATE

I-481 OVER I-90

U-WINGWALL RAIL DETAILS

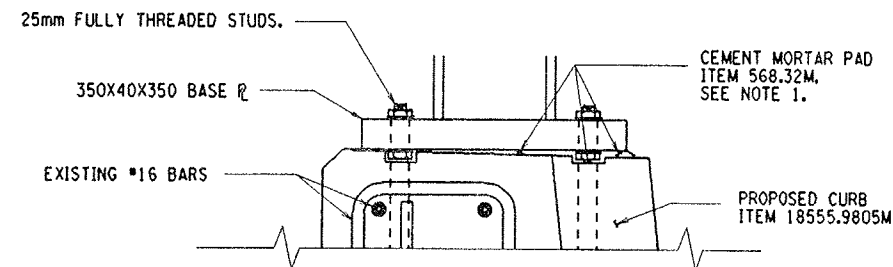


STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

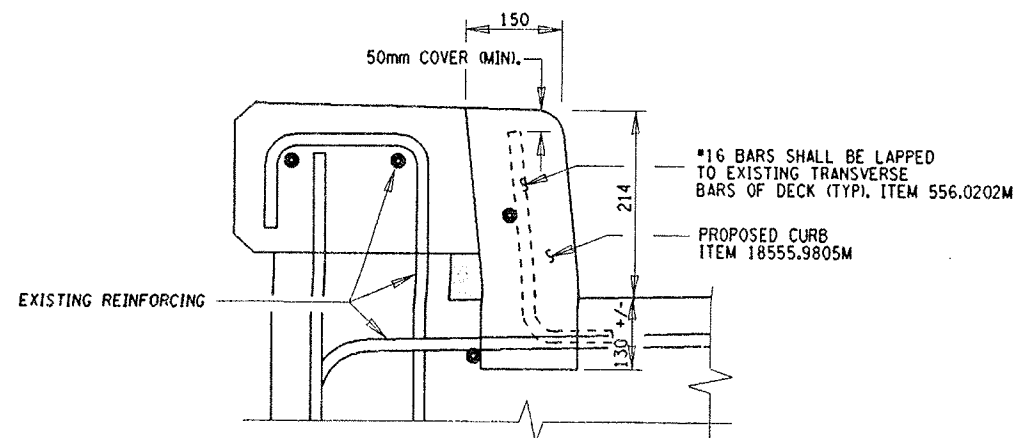
FILENAME	REGION	DATE	DRAWING NO.
380406GB.R1A	3	12/99	GB-11

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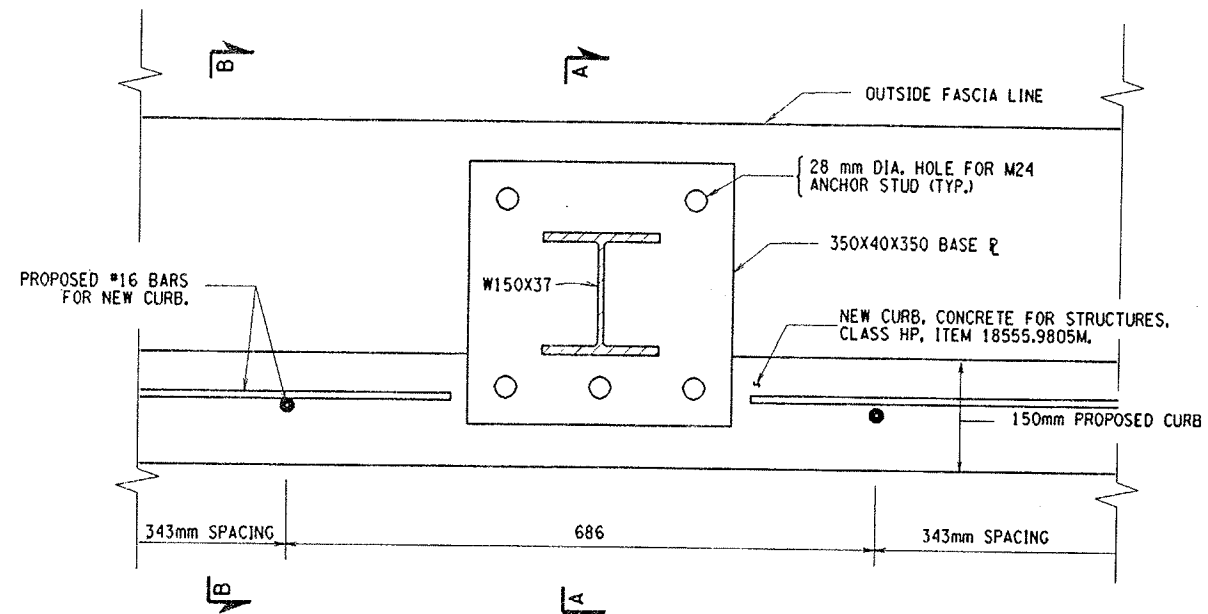
FED. ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D258367	122	354
INTERSTATE BRIDGE DECK OVERLAY PROJECT				
VARIOUS BRIDGES ON I-690, I-81 AND I-481				
ONONDAGA AND OSWEGO COUNTIES				
P.I.N. 3804.06				
B.I.N. 1093681 & 2				



SECTION A-A
NO SCALE



SECTION B-B
NO SCALE



CURB REPAIR DETAIL
NO SCALE

NOTES

1. THE COST FOR REMOVING CONCRETE FOR THE PLACEMENT OF JACKING NUTS SHALL BE INCLUDED IN THE PRICE BID FOR THE RAILING ITEM 568.50M.
2. THE EXISTING GRANITE CURB SHALL BE SALVAGED TO THE NYS DOT BRIDGE MAINTENANCE FORCES. THE NYS DOT BRIDGE MAINTENANCE FORCES WILL PICK UP THE SALVAGED GRANITE CURBING. THE CONTRACTOR SHALL TAKE CARE WHEN REMOVING THE GRANITE CURB TO PRESERVE THE SALVAGE VALUE.

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

SIGNATURE

DATE

I-481 OVER I-90

CURB REPAIR DETAILS

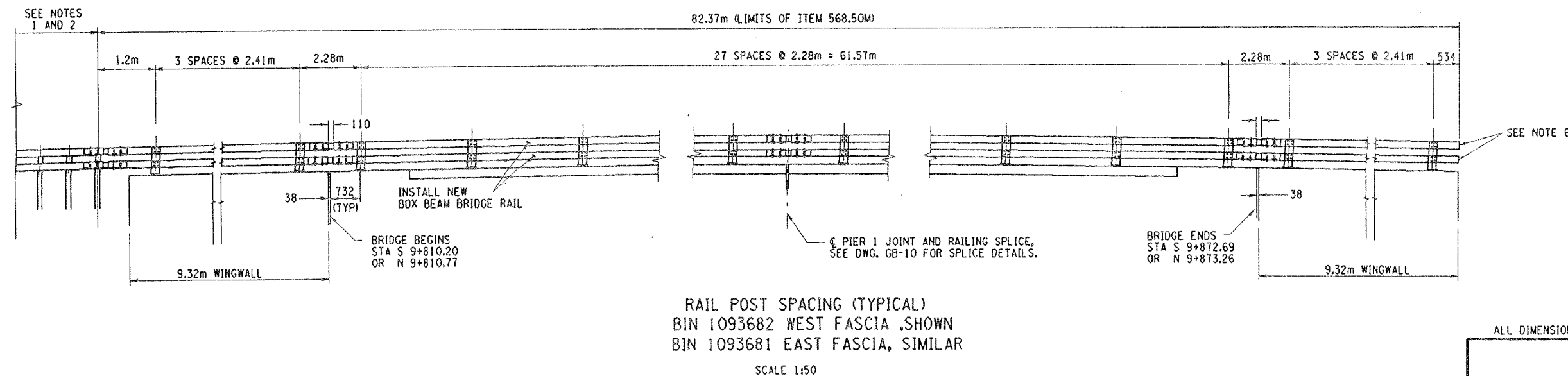
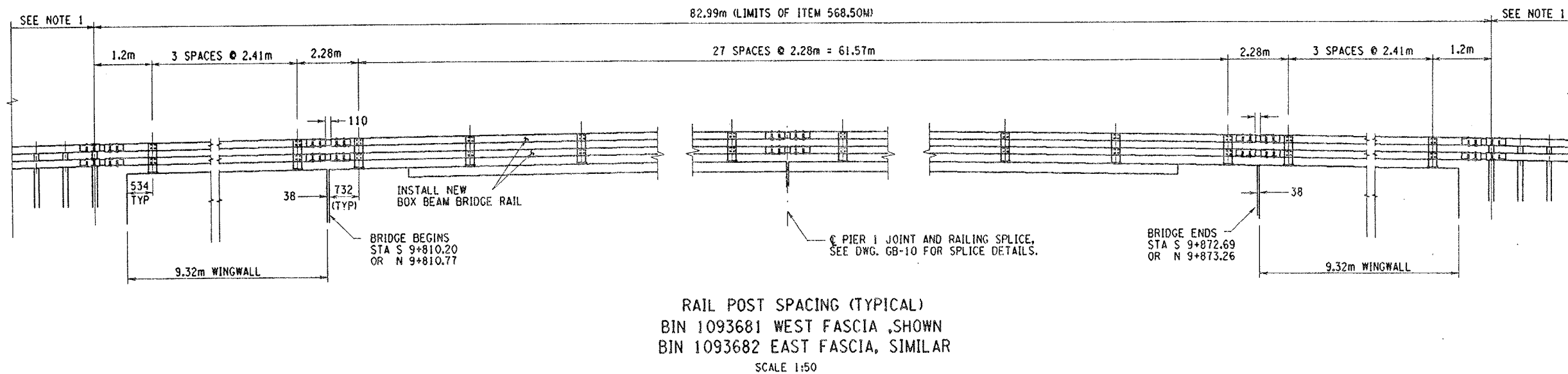


STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME	REGION	DATE	DRAWING NO.
380406GB.R1A	3	12/99	GB-12

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JOB MANAGER
DESIGN SUPERVISOR
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FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D258367	123	354
INTERSTATE DECK OVERLAY PROJECT				
VARIOUS BRIDGES ON I-690, I-81, AND I-481				
ONONDAGA AND OSWEGO COUNTIES				
P.I.N. 3804.06			B.I.N. 1031751 & 2	



NOTES:

1. FOR BRIDGE RAIL TRANSITION DETAILS SEE DWG BB-11 AND GB-15.
2. FOR DETAILS ON BOX BEAM GUIDE RAIL AND TYPE III END SECTIONS SEE DWG. GB-16 AND STANDARD SHEETS M606-3&5.
3. FOR BRIDGE RAIL ATTACHMENT DETAILS SEE DWG GB-10.
4. FOR WINGWALL ATTACHMENT DETAILS SEE DWG. GB-11.
5. FOR NEW CURB DETAILS SEE DWG. GB-12.
6. FOR DETAILS OF END CAPS TO BRIDGE RAIL SEE DWG. BB-10.
7. FOR SNOW FENCE DETAILS SEE DWG. GB-17.

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED
AS BUILT REVISIONS

SIGNATURE DATE

I-481 OVER I-90

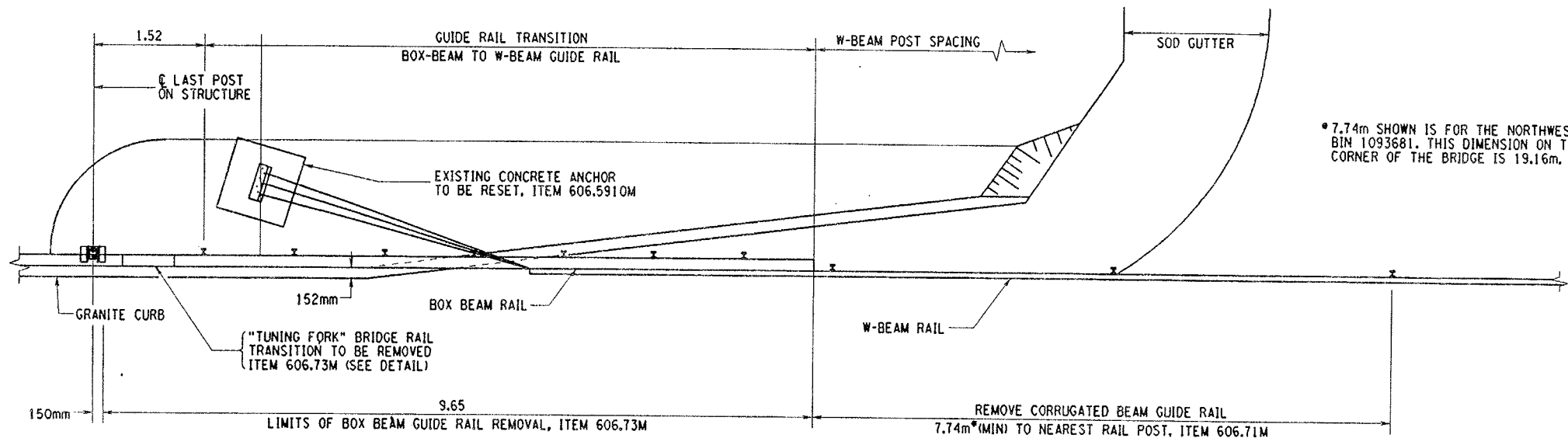
BRIDGE RAIL DETAILS



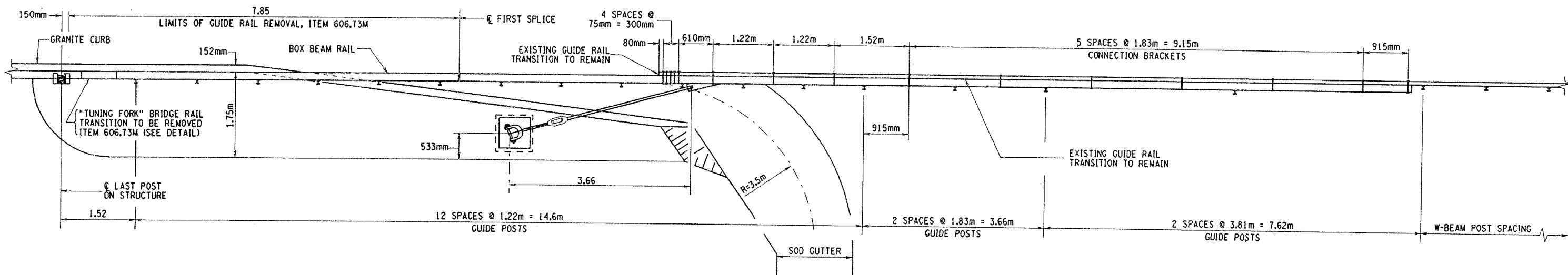
STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME 380406GB.RJA	REGION 3	DATE 12/99	DRAWING NO. GB-13
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DESIGN SUPERVISOR



EXISTING RAIL TRANSITION
BRIDGE RAIL TO HIGHWAY RAIL
BIN 1093681 - NW CORNER SHOWN, SW CORNER OPPOSITE
SCALE 1:40



EXISTING RAIL TRANSITION
BRIDGE RAIL TO HIGHWAY RAIL
BIN 1093682 - NE CORNER SHOWN, SE CORNER OPPOSITE
SCALE 1:40

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D258367	124	354
INTERSTATE BRIDGE DECK REPAIR PROJECT				
VARIOUS BRIDGES ON I-690, I-81 AND I-481				
ONONDAGA AND OSWEGO COUNTIES				
P.I.N. 3804.06		B.I.N. 1093681 & 2		

NOTES:

1. THE LOCATION OF THE FLARED SECTIONS OF THE BRIDGE RAIL TRANSITIONS MAY CONFLICT WITH THE ANCHOR CABLES FOR THE CORRUGATED BEAM TRANSITIONS. IF THIS DOES OCCUR, ONE OR BOTH OF THE ELEMENTS SHALL BE ADJUSTED AS DIRECTED BY THE ENGINEER.
2. REFER TO DWG. BB-11 FOR FURTHER DETAILS OF THE BRIDGE RAIL TRANSITIONS TO BOX BEAM RAIL.
3. REFER TO METRIC STANDARD SHEET M606-15 FOR FURTHER DETAILS OF THE TRANSITION BETWEEN BOX BEAM AND CORRUGATED BEAM RAIL.
4. THE RAIL TRANSITION BETWEEN BOX BEAM AND CORRUGATED BEAM ON THE NORTHWEST CORNER OF BIN 1093681 IS THE "ON-END" DETAIL FOR ONE-WAY TRAFFIC, WHEREAS THE SOUTHWEST CORNER OF THE BRIDGE WILL BE THE "OFF-END" DETAIL. THIS RESULTS IN DIFFERENT TRANSITION LENGTH AT THE TWO CORNERS.
5. TO MEET THE EXISTING RAIL SPLICES, THE BRIDGE RAIL TRANSITIONS ON THE SOUTHEAST AND NORTHEAST CORNERS OF BIN 1093682 ARE LONGER THAN THE STANDARD BRIDGE RAIL TRANSITION BY 0.61m. AN ADDITIONAL 0.61m SPACE SHALL BE PLACED IN THE TRANSITIONS.

ALL DIMENSIONS ARE IN m UNLESS OTHERWISE NOTED
AS BUILT REVISIONS

SIGNATURE	DATE
I-481 OVER I-90	
EXISTING RAIL TRANSITION DETAILS OUTSIDE CORNERS	
STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION	
FILENAME 380406GB.R1A	REGION 3
DATE 12/99	DRAWING NO. GB-14

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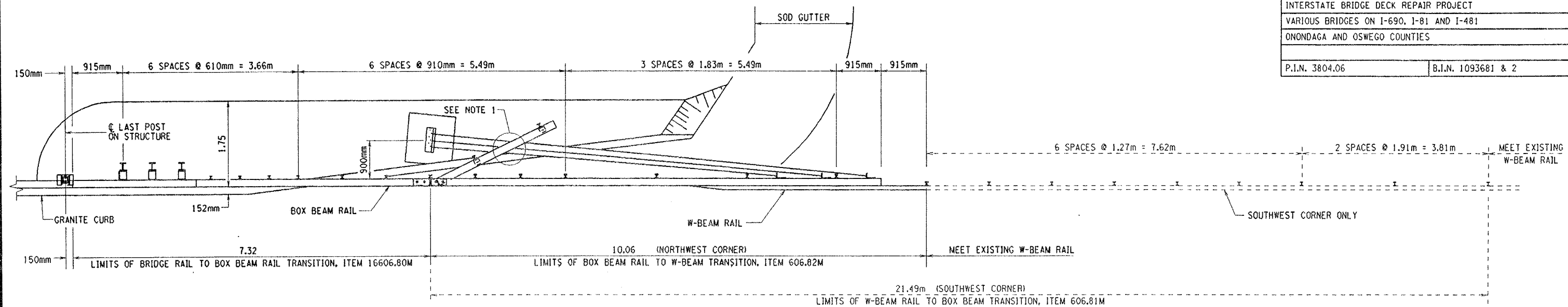
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JOB MANAGER

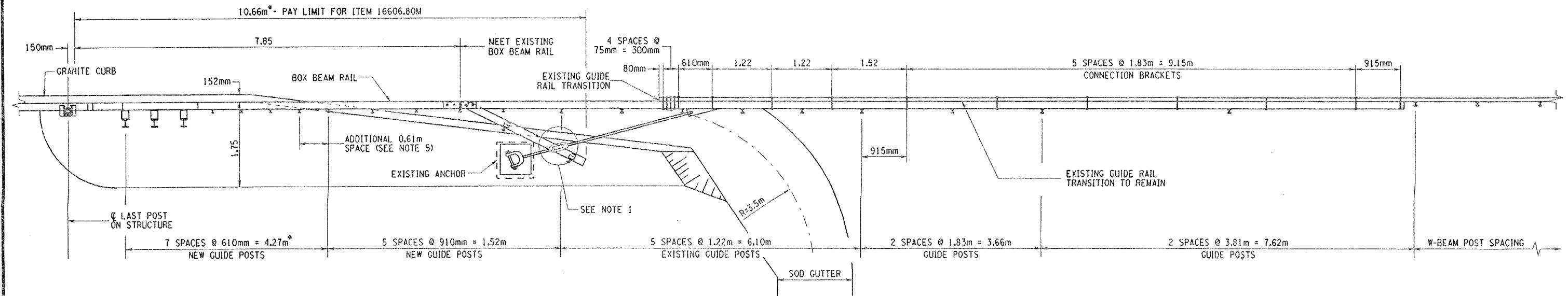
DESIGN SUPERVISOR

USER: gshub00

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D258367	125	354
INTERSTATE BRIDGE DECK REPAIR PROJECT				
VARIOUS BRIDGES ON I-690, I-81 AND I-481				
ONONDAGA AND OSWEGO COUNTIES				
P.I.N. 3804.06		B.I.N. 1093681 & 2		



PROPOSED RAIL TRANSITION
BRIDGE RAIL TO HIGHWAY RAIL
BIN 1093681 - NW CORNER SHOWN, SW CORNER OPPOSITE
SCALE 1:40



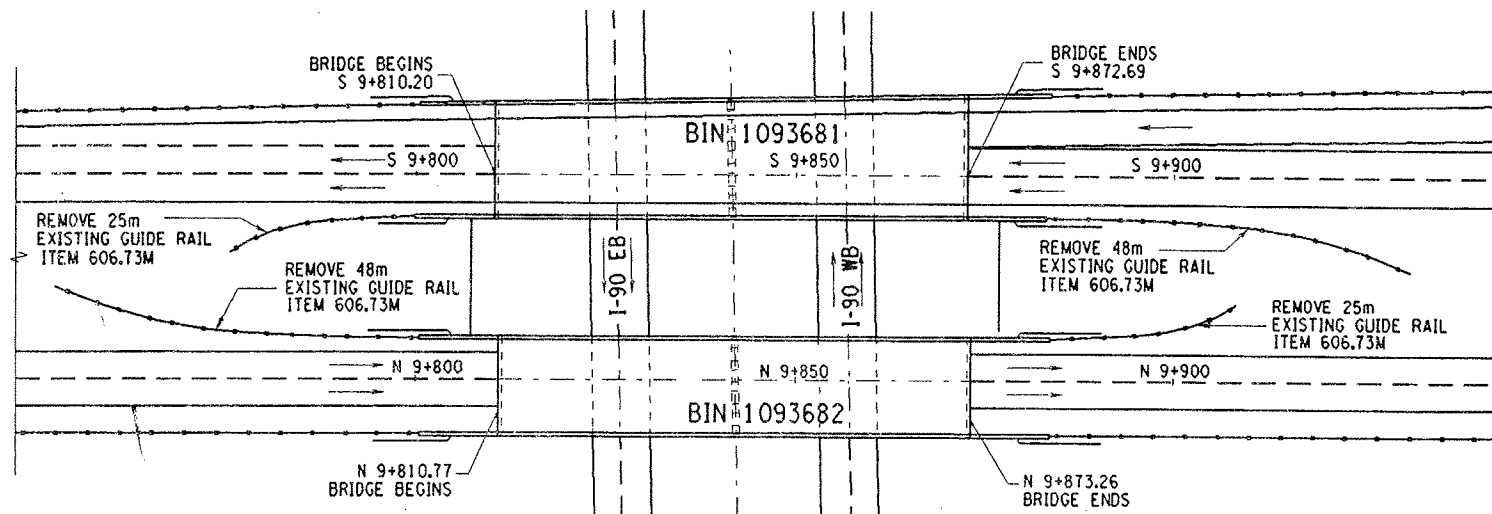
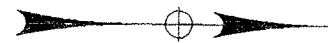
* THE LENGTH OF THE RAIL TRANSITION IS 10.66m FOR THE NORTHEAST AND SOUTHEAST CORNERS OF BIN 1093682. THIS DIMENSION IS LONGER BY ONE 0.61m POST SPACE THAN THE STANDARD TRANSITION LENGTH. THIS IS TO MEET THE EXISTING SPLICE WITH THE HIGHWAY BOX BEAM.

PROPOSED RAIL TRANSITION
BRIDGE RAIL TO HIGHWAY RAIL
BIN 1093682 - NE AND SE CORNERS
SCALE 1:40

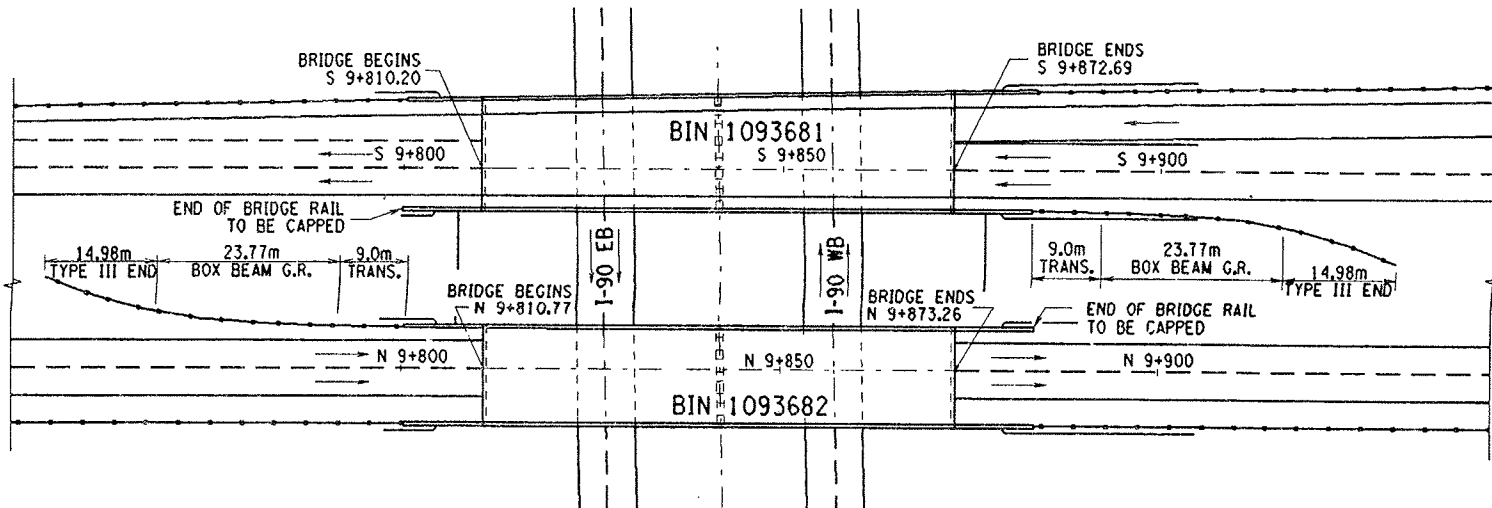
- NOTES:
1. THE LOCATION OF THE FLARED SECTIONS OF THE BRIDGE RAIL TRANSITIONS MAY CONFLICT WITH THE ANCHOR CABLES FOR THE CORRUGATED BEAM TRANSITIONS. IF THIS DOES OCCUR, ONE OR BOTH OF THE ELEMENTS SHALL BE ADJUSTED AS DIRECTED BY THE ENGINEER.
 2. REFER TO DWG. BB-11 FOR FURTHER DETAILS OF THE BRIDGE RAIL TRANSITIONS TO BOX BEAM RAIL.
 3. REFER TO METRIC STANDARD SHEET N606-15 FOR FURTHER DETAILS OF THE TRANSITION BETWEEN BOX BEAM AND CORRUGATED BEAM RAIL.
 4. THE RAIL TRANSITION BETWEEN BOX BEAM AND CORRUGATED BEAM ON THE NORTHWEST CORNER OF BIN 1093681 IS THE "ON-END" DETAIL FOR ONE-WAY TRAFFIC, WHEREAS THE SOUTHWEST CORNER OF THE BRIDGE WILL BE THE "OFF-END" DETAIL. THIS RESULTS IN DIFFERENT TRANSITION LENGTH AT THE TWO CORNERS.
 5. TO MEET THE EXISTING RAIL SPLICES, THE BRIDGE RAIL TRANSITIONS ON THE SOUTHEAST AND NORTHEAST CORNERS OF BIN 1093682 ARE LONGER THAN THE STANDARD BRIDGE RAIL TRANSITION BY 0.61m. AN ADDITIONAL 0.61m SPACE SHALL BE PLACED IN THE TRANSITIONS.

ALL DIMENSIONS ARE IN m UNLESS OTHERWISE NOTED			
AS BUILT REVISIONS			
SIGNATURE		DATE	
I-481 OVER I-90			
PROPOSED RAIL TRANSITION DETAILS OUTSIDE CORNERS			
STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION			
FILENAME	REGION	DATE	DRAWING NO.
380406GB.R1A	3	12/99	GB-15

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JOB MANAGER
DESIGN SUPERVISOR



EXISTING PLAN VIEW



PROPOSED PLAN VIEW

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D258367	126	354
INTERSTATE BRIDGE DECK REPAIR PROJECT				
VARIOUS BRIDGES ON I-690, I-81 AND I-481				
ONONDAGA AND OSWEGO COUNTIES				
P.I.N. 3804.06		B.I.N. 1093681 & 2		

NOTES:

1. FOR DETAILS OF END CAPS FOR BRIDGE RAIL SEE DWG. BB-10.
2. FOR DETAILS ON BRIDGE RAIL TRANSITIONS SEE DWG. BB-11.
3. FOR DETAILS ON TANGENT SECTIONS OF BOX BEAM GUIDE RAIL REFER TO STANDARD SHEET M606-3.
4. FOR DETAILS ON TYPE III END SECTIONS FOR BOX BEAM GUIDE RAIL REFER TO STANDARD SHEET M606-5.
5. FOR DETAILS OF GUIDE RAIL AT OUTSIDE CORNERS SEE DWG. GB-15.

ALL DIMENSIONS ARE IN m UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

SIGNATURE

DATE

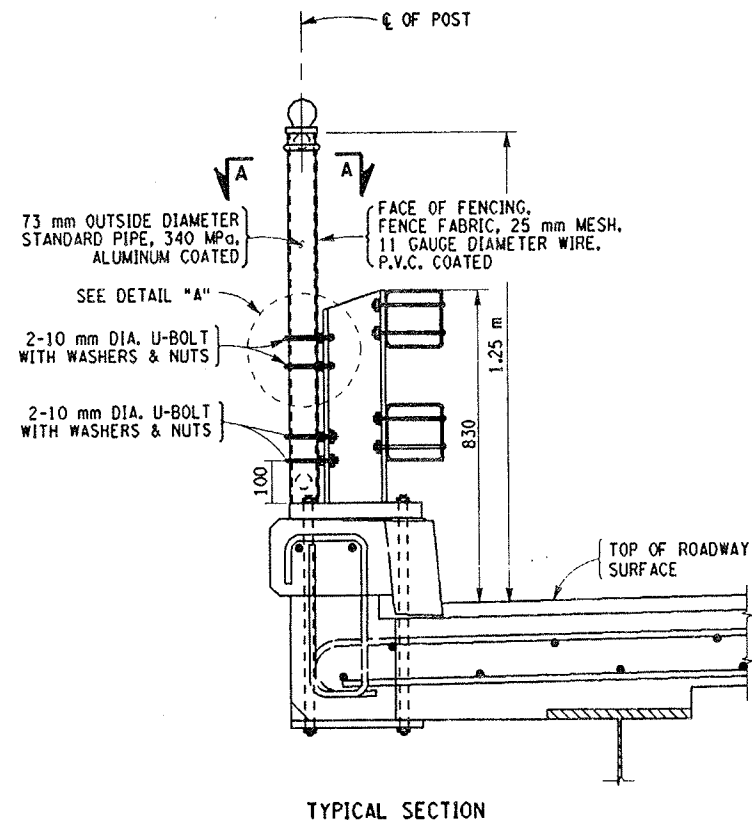
I-481 OVER I-90

PROPOSED RAIL TRANSITION DETAILS
INSIDE CORNERS



STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME	REGION	DATE	DRAWING NO.
380406GB.R1A	3	12/99	GB-16



TYPICAL SECTION
SNOW FENCE POST ATTACHMENT
TO TWO RAIL RAILING
SCALE 1:10

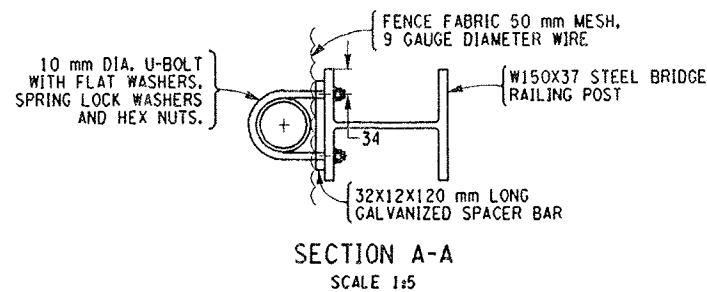
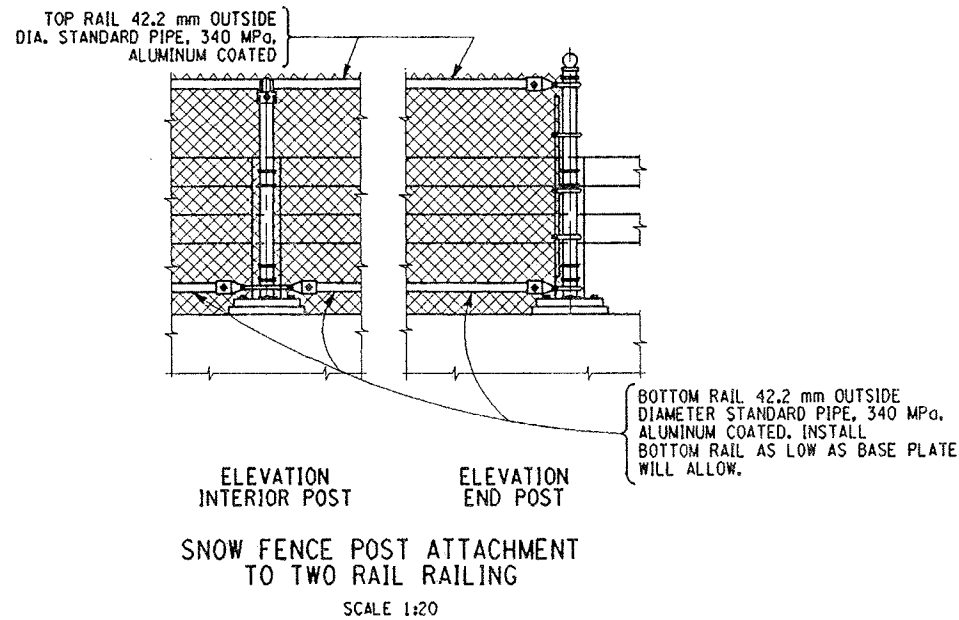
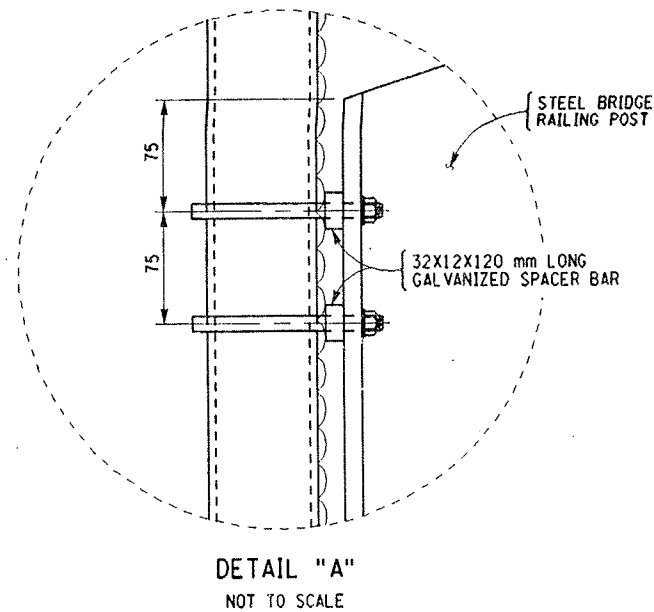
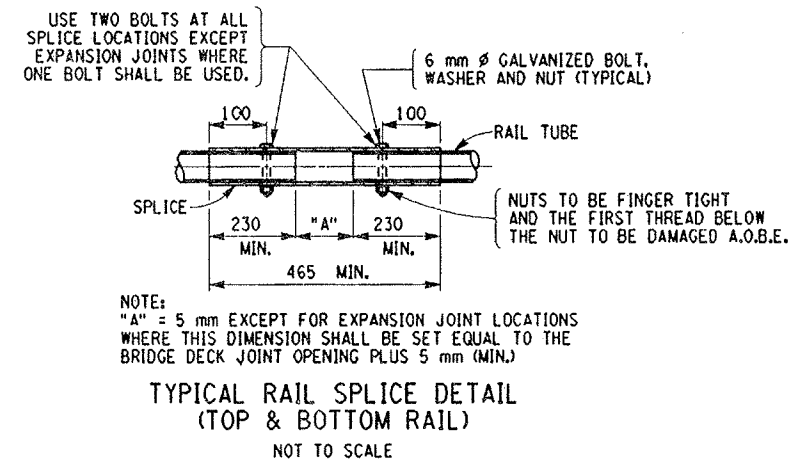


TABLE OF SNOW FENCING			
ITEM 16607.0641M, SNOW FENCING FOR BRIDGES			
LOCATION	BIN	SIDE	METER
I-690 / I-90 (THRUWAY)	1093681	BOTH	45.6m (EACH)
I-690 / I-90 (THRUWAY)	1093682	BOTH	45.6m (EACH)
TOTAL			182.4m

NOTE:
THE SNOW FENCE SHALL EXTEND 6.0 METERS BEYOND THE LEADING EDGE
OF THE SHOULDER OF THE ROADWAY BELOW.



- NOTES:
- THE CONTRACTOR SHALL VERIFY THE SPACING AND DIMENSIONS OF ALL BRIDGE RAIL TYPES PRIOR TO BIDDING THE CONTRACT AND ORDERING THE MATERIALS.
 - THE 127 x 127 x 12.7 AND 152 x 152 x 12.7 STRUCTURAL STEEL ANGLES SHALL BE A36 GALVANIZED STEEL, ALL OTHER HARDWARE SHALL BE GALVANIZED STEEL.
 - ALL GALVANIZED STEEL COMPONENTS SHALL CONFORM TO THE REQUIREMENTS OF THE N.Y.S.D.O.T. SPECIFICATIONS SECTION 607 - FENCES AND SECTION 719-01 - GALVANIZED COATINGS AND REPAIR METHODS.
 - THE COST OF FURNISHING ALL MATERIALS, LABOR, EQUIPMENT, FIELD DRILLING OF HOLES AND REPAIRS TO ALL GALVANIZED COATINGS TO BE INCLUDED IN THE PRICE BID FOR ITEM 16607.0641M.
 - A FENCE RAIL EXPANSION SPLICE IS REQUIRED IN THE TOP AND BOTTOM FENCE RAILS BETWEEN BRIDGE RAIL POSTS WHEN A BRIDGE RAIL EXPANSION SPLICE EXISTS BETWEEN THOSE BRIDGE RAIL POSTS.

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED
AS BUILT REVISIONS

SIGNATURE _____ DATE _____
I-481 OVER I-90

SNOW FENCE DETAILS

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME	REGION	DATE	DRAWING NO.
380406GB.R1A	3	12/99	QB-17

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DESIGNED BY
JOB MANAGER
DESIGN SUPERVISOR

BRIDGE JOINT TABLE														
B.I.N. NUMBER	JOINT LOCATION	JOINT SKEW	SPAN(S) LENGTH FOR JOINT	JOINT BEND LOCAT'N		EXIST. JOINT TYPE	PROPOSED JOINT TYPE	CURB TO CURB DISTANCE (SEE NOTES)	FASCIA/ MEDIAN LENGTH	TOTAL LENGTH	ITEM NUMBER	DRAWING NUMBER		
				LT	RT							PLAN VIEW	SECT VIEW	FASCIA DETAIL
BIN 1026099 (EASTBOUND)	E. ABUT	40°-47'-23"	————	PAV'T	N	ACF	A-1 MAC	16.18m	0.48m	16.66m	567.31M	AB-3	AB-4	AB-5
	PIER 1	40°-47'-23"	43.40m	PAV'T	N	ACX	A-6 MAC	16.38m	0.48m	16.86m	567.36M	AB-3	AB-4	AB-5
	PIER 2	40°-47'-23"	23.65m	PAV'T	N	ACX	A-4 MAC	16.38m	0.48m	16.86m	567.34M	AB-3	AB-4	AB-5
	PIER 3	40°-47'-23"	16.93m	PAV'T	N	ACX	A-2 MAC	16.38m	0.48m	16.86m	567.32M	AB-3	AB-4	AB-5
	W. ABUT	40°-47'-23"	————	PAV'T	N	ACF	A-1 MAC	17.12m	0.48m	17.60m	567.31M	AB-3	AB-4	AB-5
BIN 1031751	S. ABUT	0°-00'-00"	————	N	N	CS	CS	• 0.92mm	1.70m	2.62m	16567.64M	BB-5	BB-6	BB-7
	N. ABUT	0°-00'-00"	28.80m	N	N	CS	CS	14.94m	1.64m	16.58m	16567.64M	BB-5	BB-6A	BB-7
	LONGITUDINAL	————	————	—	—	CS	CS	** 4 @ 0.90m	—	3.60m	16567.64M	BB-5	BB-7	—
BIN 1031752	S. ABUT	0°-00'-00"	————	N	N	CS	CS	• 0.92m	1.70m	2.62m	16567.64M	BB-5	BB-6	BB-7
	N. ABUT	0°-00'-00"	28.80m	N	N	CS	CS	17.07m	1.64m	18.71m	16567.64M	BB-5	BB-6A	BB-7
	LONGITUDINAL	————	————	—	—	CS	CS	** 4 @ 0.90m	—	3.60m	16567.64M	BB-5	BB-7	—
BIN 1031771	S. ABUT	5°-17'-29"	————	N	N	CS	CS	15.00m	1.64m	16.64m	16567.64M	DB-4	DB-5	DB-7
	PIER 1	5°-17'-29"	27.40m	CRB	CRB	ACX	A-4 MAC	15.00m	1.64m	16.64m	567.34M	DB-8	DB-9	DB-8
	PIER 2	5°-17'-29"	13.51m	CRB	CRB	ACX	A-2 MAC	15.00m	1.64m	16.64m	567.32M	DB-8	DB-9	DB-8
	N. ABUT	5°-17'-29"	————	N	N	ACF	A-1 MAC	15.00m	1.64m	16.64m	567.31M	DB-4	DB-6	DB-7
	LONGITUDINAL	————	————	—	—	CS	CS	** 4 @ 0.90m	—	3.60m	16567.64M	DB-4	DB-7	—
BIN 1031772	S. ABUT	5°-17'-29"	————	N	N	CS	CS	15.00m	1.64m	16.64m	16567.64M	DB-4	DB-5	DB-7
	PIER 1	5°-17'-29"	27.40m	CRB	CRB	ACX	A-4 MAC	15.00m	1.64m	16.64m	567.34M	DB-8	DB-9	DB-8
	PIER 2	5°-17'-29"	13.51m	CRB	CRB	ACX	A-2 MAC	15.00m	1.64m	16.64m	567.32M	DB-8	DB-9	DB-8
	N. ABUT	5°-17'-29"	————	N	N	ACF	A-1 MAC	15.00m	1.64m	16.64m	567.31M	DB-4	DB-6	DB-7
	LONGITUDUNAL	————	————	—	—	CS	CS	** 4 @ 0.90m	—	3.60m	16567.64M	DB-4	DB-7	—
BIN 1051139 (WESTBOUND)	W. ABUT	9°-22'-04"	————	PAR	—	CS	A-1 MAC	13.05m	0.59m	13.64m	567.31M	EB-6	EB-8	EB-9
	PIER 1	10°-22'-18"	18.97m	PAR	—	CS	A-3 MAC	13.10m	0.59m	13.69m	567.33M	EB-7	EB-8	EB-9
	PIER 2	12°-39'-26"	32.32m	PAR	—	CS	A-5 MAC	13.20m	0.59m	13.79m	567.35M	EB-7	EB-8	EB-9
	PIER 3	14°-58'-52"	32.32m	PAR	—	CS	A-5 MAC	13.33m	0.59m	13.92m	567.35M	EB-7	EB-8	EB-9
	PIER 4	17°-13'-52"	32.33m	PAR	—	CS	A-5 MAC	13.49m	0.59m	14.08m	567.35M	EB-7	EB-8	EB-9
	PIER 5	4°-23'-52"	26.21m	PAR	—	CS	A-5 MAC	12.92m	0.59m	13.51m	567.35M	EB-7	EB-8	EB-9
	PIER 6	2°-12'-07"	32.32m	PAR	—	CS	A-5 MAC	14.72m	0.59m	15.31m	567.35M	EB-7	EB-8	EB-9
	PIER 7	0°-00'-00"	32.30m	N	—	CS	A-5 MAC	15.93m	0.59m	16.52m	567.35M	EB-7	EB-8	EB-9
	PIER 8	0°-00'-00"	32.31m	N	—	CS	A-5 MAC	15.93m	0.59m	16.52m	567.35M	EB-7	EB-8	EB-9
	PIER 9	0°-00'-00"	32.31m	N	—	CS	A-5 MAC	15.93m	0.59m	16.52m	567.35M	EB-7	EB-8	EB-9
	PIER 10	0°-00'-00"	32.31m	N	—	CS	A-5 MAC	15.93m	0.59m	16.52m	567.35M	EB-7	EB-8	EB-9
	PIER 11	0°-00'-00"	32.31m	N	—	CS	A-5 MAC	15.93m	0.59m	16.52m	567.35M	EB-7	EB-8	EB-9
	PIER 12	0°-00'-00"	32.31m	N	—	CS	A-5 MAC	15.93m	0.59m	16.52m	567.35M	EB-7	EB-8	EB-9
	PIER 13	0°-00'-00"	32.31m	N	—	CS	A-5 MAC	15.93m	0.59m	16.52m	567.35M	EB-7	EB-8	EB-9
	PIER 14	0°-00'-00"	32.31m	N	—	CS	A-5 MAC	16.39m	0.59m	16.98m	567.35M	EB-7	EB-8	EB-9
	E. ABUT	0°-00'-00"	31.07m	CRB	—	CS	A-5 MAC	19.58m	0.59m	20.17m	567.35M	EB-6	EB-8	EB-9
	LONGITUDINAL	————	————	—	—	CS	CS	** 486.81m	—	486.81m	16567.64M	EB-6.7	EB-9	—

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D258367	128	354
INTERSTATE BRIDGE DECK OVERLAY PROJECT				
VARIOUS BRIDGES ON I-690, I-81 AND I-481				
ONONDAGA AND OSWEGO COUNTIES				
P.I.N. 3804.06		B.I.N. ALL BINS		

LEGEND

EXISTING JOINT TYPE

ACF = ARMORED COMPRESSION-FIXED
ACX = ARMORED COMPRESSION-EXPANSION
MOD1 = ONE-CELL MODULAR
CS = COMPRESSION SEAL JOINT

PROPOSED JOINT TYPE

A-'X' MAC = MODIFIED ARMORED
COMP. SEAL-TYPE 1

MOD-1 = ONE CELL MODULAR JT.

CS = COMPRESSION SEAL
ITEM 16567.64M - REPLACE COMP. SEAL IN
EXISTING BRIDGE JOINT.

JOINT BEND LOCATION

N = NO BENDS
CRB = CURB LINE
PAR = PARAPET
PAV'T = PAVEMENT

NOTES:

1. ALL MEASUREMENTS SHALL BE VERIFIED
IN THE FIELD BY THE CONTRACTOR.

2. CURB TO CURB LENGTHS ARE MEASURED
ALONG THE C OF THE JOINT.

3. ALL DIMENSIONS AND SIDE REFERENCES
ARE SHOWN LOOKING UP-STATION.

4. FOR GENERAL JOINT NOTES AND DETAILS,
REFER TO THE JOINT DETAILS ON
DWG. JT-1.

5. ALL DIMENSIONS ARE SHOWN IN METERS.

• THESE COMPRESSION SEALS EXTEND
ONLY AS FAR AS THE COVER WALL.

** THESE DIMENSIONS ARE ALONG
THE CURB OR MEDIAN FACE.

ALL DIMENSIONS ARE IN m UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

SIGNATUREDATE

BRIDGE JOINT TABLE
SHEET 1 OF 2

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME380406JB.L1A

REGION3

DATE12/99

DRAWING NO.
JT-1

BRIDGE	JOINT	TABLE
1	1	1
2	2	2
3	3	3
4	4	4
5	5	5
6	6	6
7	7	7
8	8	8
9	9	9
10	10	10
11	11	11
12	12	12
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16	16	16
17	17	17
18	18	18
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97	97	97
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99	99	99
100	100	100

B.I.N. NUMBER	JOINT LOCATION	JOINT SKEW	SPAN(S) LENGTH FOR JOINT	JOINT BEND LOCAT'N		EXIST. JOINT TYPE	PROPOSED JOINT TYPE	CURB TO CURB DISTANCE (SEE NOTES)	FASCIA/ MEDIAN LENGTH	TOTAL LENGTH	ITEM NUMBER	DRAWING NUMBER		
				LT	RT							PLAN VIEW	SECT VIEW	FASCIA DETAIL
BIN 1051149	W. ABUT	17°-04'-55"	————	CRB	CRB	ACF	A-1 MAC	15.63m	.56m	16.19m	567.31M	FB-3	FB-3	FB-4
(WESTBOUND)	E. ABUT	17°-04'-55"	23.62m	CRB	CRB	ACX	A-4 MAC	15.63m	.56m	16.19m	567.34M	FB-3	FB-3	FB-4
	LONGITUDINAL	————	————	——	——	CS	CS	•• 25.51m	——	25.51m	16567.64M	FB-3	FB-4	——
BIN 1093681	S. ABUT	0°-00'-00"	30.63m	N	N	ACX	A-5 MAC	14.48m	.92m	15.40m	567.35M	GB-4	GB-5	GB-6
	PIER 1	0°-00'-00"	————	N	N	ACF	A-1 MAC	15.02m	.92m	15.94m	567.31M	GB-3	GB-5	GB-6
	N. ABUT	0°-00'-00"	30.63m	N	N	ACX	A-5 MAC	15.55m	.92m	16.47m	567.35M	GB-4	GB-5	GB-6
BIN 1093682	S. ABUT	0°-00'-00"	30.63m	N	N	ACX	A-5 MAC	12.50m	.92m	13.42m	567.35M	GB-4	GB-5	GB-6
	PIER 1	0°-00'-00"	————	N	N	ACF	A-1 MAC	12.50m	.92m	13.42m	567.31M	GB-3	GB-5	GB-6
	N. ABUT	0°-00'-00"	30.63m	N	N	ACX	A-5 MAC	12.50m	.92m	13.42m	567.35M	GB-4	GB-5	GB-6
BIN 4031761	S. ABUT	0°-00'-00"	23.95m	N	N	ACX	A-3 MAC	12.20m	1.52m	13.72m	567.33M	CB-4	CB-5	CB-5
	N. ABUT	0°-00'-00"	121.49m	N	N	MOD1	MOD-1	12.20m	1.52m	13.72m	566.01M	CB-4	CB-6	CB-5
BIN 4031762	S. ABUT	0°-00'-00"	23.95m	N	N	ACX	A-3 MAC	12.20m	1.52m	13.72m	567.33M	CB-4	CB-5	CB-5
	N. ABUT	0°-00'-00"	121.49m	N	N	MOD1	MOD-1	12.20m	1.52m	13.72m	566.01M	CB-4	CB-6	CB-5

LEGEND

EXISTING JOINT TYPE

ACF = ARMORED COMPRESSION-FIXED
ACX = ARMORED COMPRESSION-EXPANSION
MOD1 = ONE-CELL MODULAR
CS = COMPRESSION SEAL JOINT

PROPOSED JOINT TYPE

A-'X' MAC = MODIFIED ARMORED
COMP. SEAL-TYPE 1

MOD-1 = ONE CELL MODULAR JT.

CS = COMPRESSION SEAL

ITEM 16567.64M - REPLACE COMP. SEAL IN
EXISTING BRIDGE JOINT.

JOINT BEND LOCATION

N = NO BENDS
CRB = CURB LINE
PAR = PARAPET
PAV'T = PAVEMENT

NOTES:

1. ALL MEASUREMENTS SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR.
2. CURB TO CURB LENGTHS ARE MEASURED ALONG THE \mathcal{C} OF THE JOINT.
3. ALL DIMENSIONS AND SIDE REFERENCES ARE SHOWN LOOKING UP-STATION.
4. FOR GENERAL JOINT NOTES AND DETAILS, REFER TO THE JOINT DETAILS ON DWG. JT-1.
5. ALL DIMENSIONS ARE SHOWN IN METERS.

- THESE COMPRESSION SEALS EXTEND ONLY AS FAR AS THE COVER WALL.

•• THESE DIMENSIONS ARE ALONG THE CURB OR MEDIAN FACE.

ALL DIMENSIONS ARE IN m UNLESS OTHERWISE NOTED
AS BUILT REVISIONS

SIGNATURE

DATE _____

BRIDGE JOINT TABLE
SHEET 2 OF 2

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

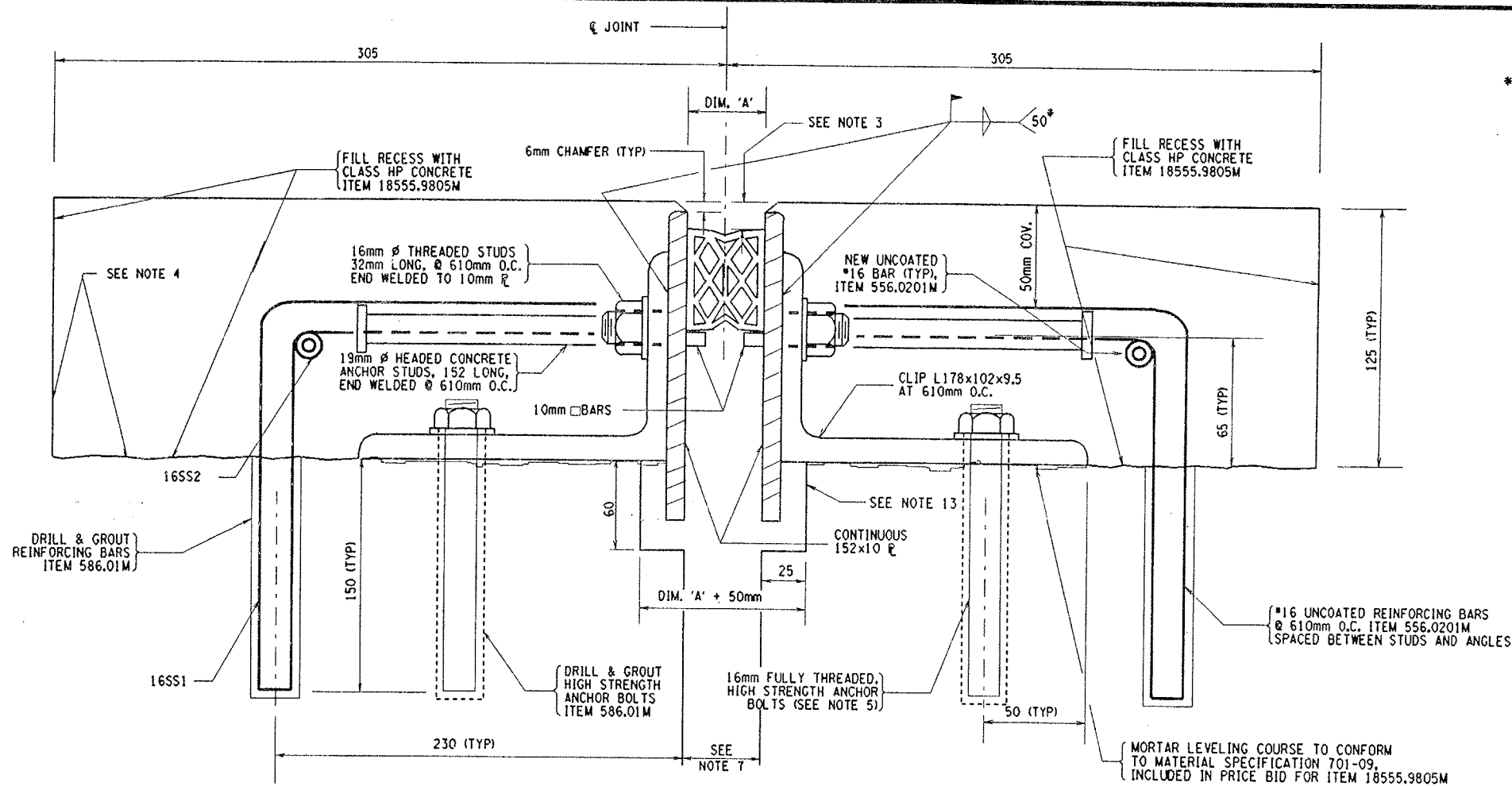
FILENAME
380406JB.L1A

REGION
3

DATE
12/99

DRAWING NO.
JT-2

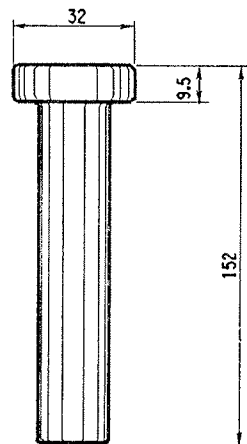
CHECKED BY
DRAFTED BY
ESTIMATED BY
DESIGNED BY
JOB MANAGER
DESIGN SUPERVISOR



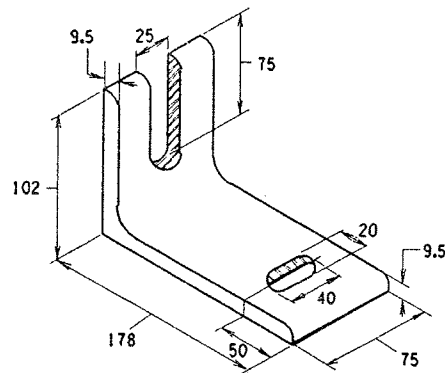
MODIFIED ARMORED COMPRESSION
JOINT DETAIL

SEALS (mm)			ARMORED JOINT SYSTEM	
TYPE	NOMINAL WIDTH	DIM. "A" @ 20°C.	TYPE	END CONDITION
1	44	25	A1	Fixed End Only
2	51	30	A2	Exp. up to 18 m
3	64	38	A3	Exp. over 18 m to 23 m
4	76	44	A4	Exp. over 23 m to 27 m
5	89	52	A5	Exp. over 27 m to 38 m

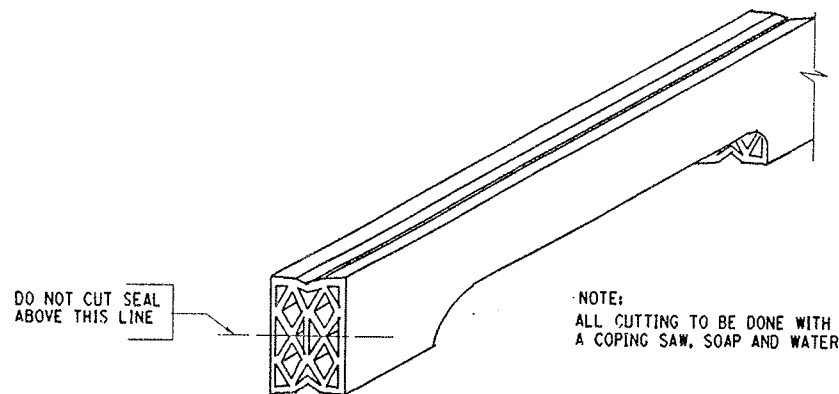
Maximum Skew Limits: Fixed End - No Limit
Exp. End - 45° A2 thru A6



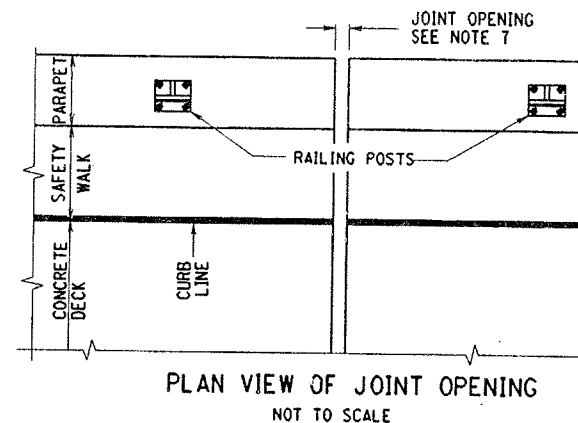
DETAIL OF HEADED CONCRETE
ANCHOR STUD



DETAIL OF CLIP ANGLE



DETAIL FOR CUTTING SEAL



* WELD SHALL BE 50mm EACH SIDE OF
ANGLE AFTER SETTING FOR GRADE

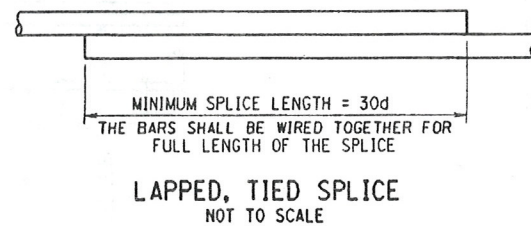
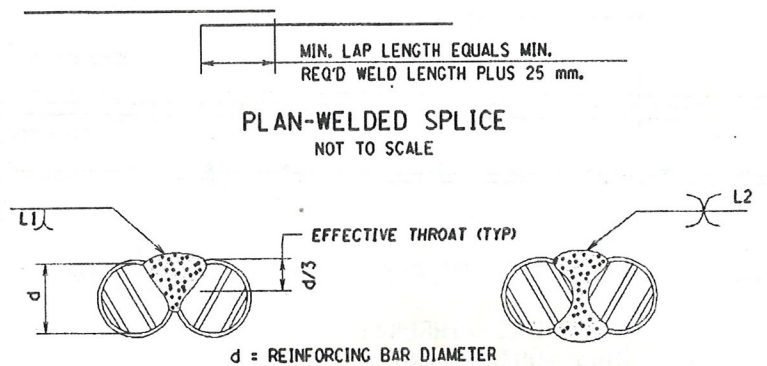
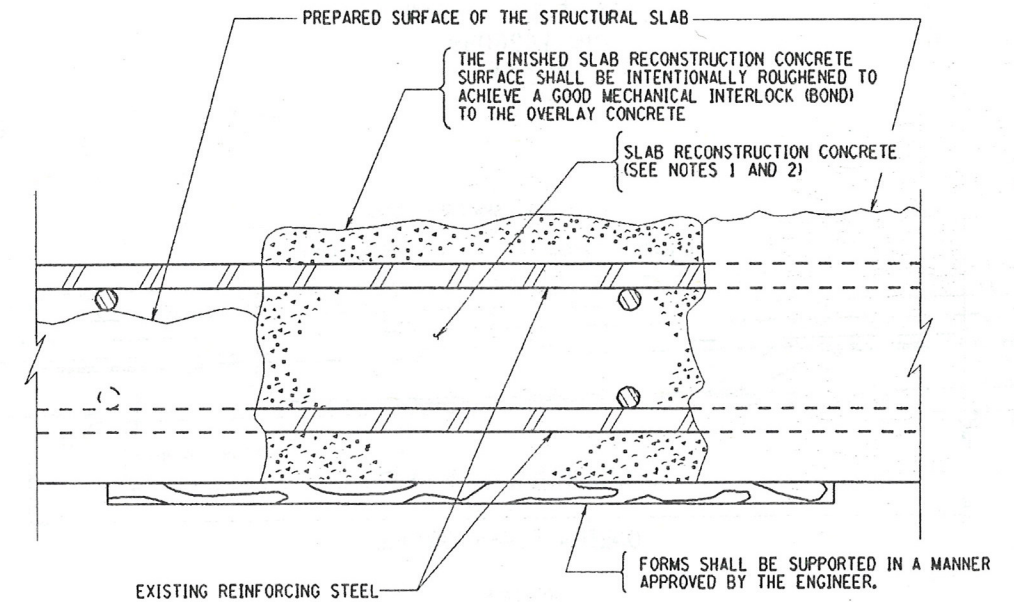
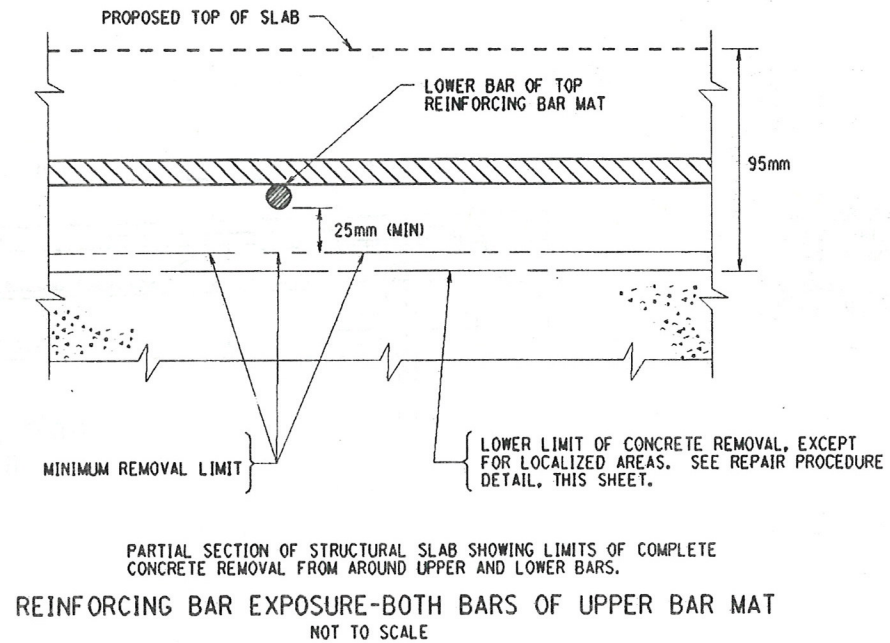
FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D258367	130	354
INTERSTATE BRIDGE DECK OVERLAY PROJECT				
VARIOUS BRIDGES ON I-690, I-81 AND I-481				
ONONDAGA AND OSWEGO COUNTIES				
P.I.N. 3804.06		B.I.N. VARIOUS		

NOTES:

1. THE TEMPERATURE OF THE BRIDGE MUST BE TAKEN ON THE STRUCTURAL STEEL SURFACE TO DETERMINE THE TEMPERATURE CORRECTION FOR THE JOINT OPENINGS.
2. THE BAR LIST IS LOCATED ON DWGS. BL-2 TO BL-3.
3. THIS DEPTH SHALL BE INDICATED ON THE SHOP DRAWINGS AND SHALL BE SUCH THAT WHEN THE SEAL IS COMPRESSED TO 50% OF ITS NORMAL WIDTH, THE TOP OF THE SEAL SHALL BE NOT LESS THAN 6mm NOR MORE THAN 19mm BELOW THE TOP OF THE ROADWAY.
4. THOROUGHLY COAT THE BOTTOM AND VERTICAL SURFACES OF THE RECESS WITH MATERIAL SPEC. 721-03, EPOXY POLYSULFIDE GROUT, OR MATERIAL SPEC. 705-22, PORTLAND CEMENT MORTAR BONDING GROUT. THE COST OF FURNISHING AND PLACING THE MATERIAL SHALL BE INCLUDED IN THE PRICE BID ITEM 18555.9805M.
5. THE LOAD TESTING REQUIREMENTS DICTATED FOR USE WITH ITEM 586.01M ARE WAIVED FOR THE HIGH-STRENGTH BOLTS IN THE JOINT BLOCKOUT. THE NUTS ON THE BOLTS SHALL BE TIGHTENED TO A SNUG TIGHT CONDITION.
6. A WATER-TIGHT INTEGRITY TEST SHALL BE PERFORMED BY THE CONTRACTOR AT ALL COMPRESSION SEAL JOINT INSTALLATIONS. THE FOLLOWING TEST PARAMETERS SHALL BE INCORPORATED IN THE TEST:
 1. A 15 MINUTE MINIMUM PERIOD OF STANDING WATER, WITH A 25mm MINIMUM DEPTH SHALL BE USED.
 2. IN ADDITION, IN LOCATIONS OF COPED AREAS OF THE SEAL, BENDS, ETC., WATER PRESSURE SHALL BE APPLIED, TO THE SATISFACTION OF THE EIC FOR A 15 MINUTE PERIOD.
 3. LIMITS OF TEST AREA SHALL BE FROM FACE OF CURB (PARAPET) TO FACE OF CURB (PARAPET) ON THE DECK SURFACE.
7. CONCRETE DECKS, INCLUDING FASCIAS, THAT ARE LESS THAN 25mm APART SHALL BE SAWCUT TO CREATE A 25mm MINIMUM OPENING. THE COST FOR THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR THE JOINT ITEMS.
8. PRIOR TO THE START OF WORK AT EACH JOINT, THE CONTRACTOR SHALL SUBMIT A WRITTEN PLAN FOR THE SPECIFICS OF THE TESTING, INCLUDING CONTAINMENT OF THE WATER AND THE METHOD TO BE USED FOR ACCESS BY THE E.I.C. TO THE BOTTOM OF THE JOINT BEING TESTED.
9. THE COST OF ALL LABOR, EQUIPMENT AND MATERIALS REQUIRED FOR THE TESTING WHICH INCLUDES, BUT IS NOT LIMITED TO:
 1. A CONTAINMENT SYSTEM FOR THE TEST WATER.
 2. PROVISIONS FOR E.I.C. ACCESS TO THE BOTTOM OF THE JOINT.SHALL BE INCLUDED IN THE PRICE BID FOR THE RESPECTIVE JOINT ITEMS.
10. ALL DIMENSIONS ARE SHOWN IN MILLIMETERS UNLESS OTHERWISE NOTED.
11. THE COST OF ALL LABOR, EQUIPMENT, AND MATERIALS TO INSTALL THE NEW JOINT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE MAC-1 JOINT ITEM.
12. MORTAR LEVELING COURSE SHALL CONFORM TO MATERIAL SPECIFICATION 701-09 AND SHALL BE INCLUDED IN THE PRICE BID FOR ITEM 18555.9805M.
13. THE DIMENSIONS OF THE AREA UNDER THE 152x10 PLATES ARE SHOWN TO ALLOW SPACE FOR THE PLATES TO REST FREELY. IF THERE IS ALREADY ADEQUATE SPACE, NO CONCRETE REMOVAL OR REPLACEMENT IS REQUIRED IN THIS AREA.

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED			
AS BUILT REVISIONS			
SIGNATURE		DATE	
MODIFIED ARMORED COMPRESSION (MAC) JOINT DETAILS			
STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION			
FILENAME 380406MC.J1A	REGION 3	DATE 12/99	DRAWING NO. JT-3

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D258367	131	354
INTERSTATE BRIDGE DECK OVERLAY PROJECT				
VARIOUS BRIDGES ON I-690, I-81 AND I-481				
ONONDAGA AND OSWEGO COUNTIES				
P.I.N. 3804.06		B.I.N. VARIOUS		



- NOTE:
1. THE SLAB RECONSTRUCTION ITEM IS SERIALIZED TO DISTINGUISH ITS USAGE ON EACH STRUCTURE. THE COST OF WORK SHALL BE INCLUDED IN THE PRICE BID FOR THE ADJACENT SLAB RECONSTRUCTION SLAB ITEM.
 2. THE FULL DEPTH SLAB REPAIR AREAS (SEE DWG. AB-7, EB-44, 45 AND 46) SHALL BE REPAIRED WITH CONCRETE FOR STRUCTURES, CLASS HP, ITEM 18555.9805M.

THESE SHEETS
DO NOT INDICATE
ANY FULL DEPTH
REPAIRS FOR
BIN 1093682

SINGLE FLARE V-GROOVE WELD DOUBLE FLARE V-GROOVE WELD

MINIMUM WELD LENGTHS (mm)		
BAR SIZE	SINGLE FLARE V-GROOVE WELD L1	DOUBLE FLARE V-GROOVE WELD L2
10, 13, 16	100	65
19	115	70
22	125	75
25	140	85

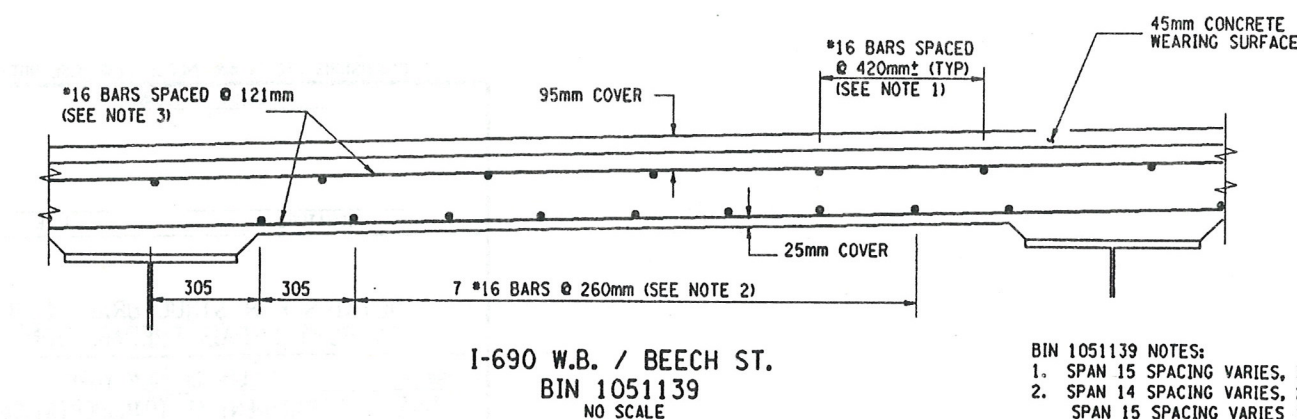
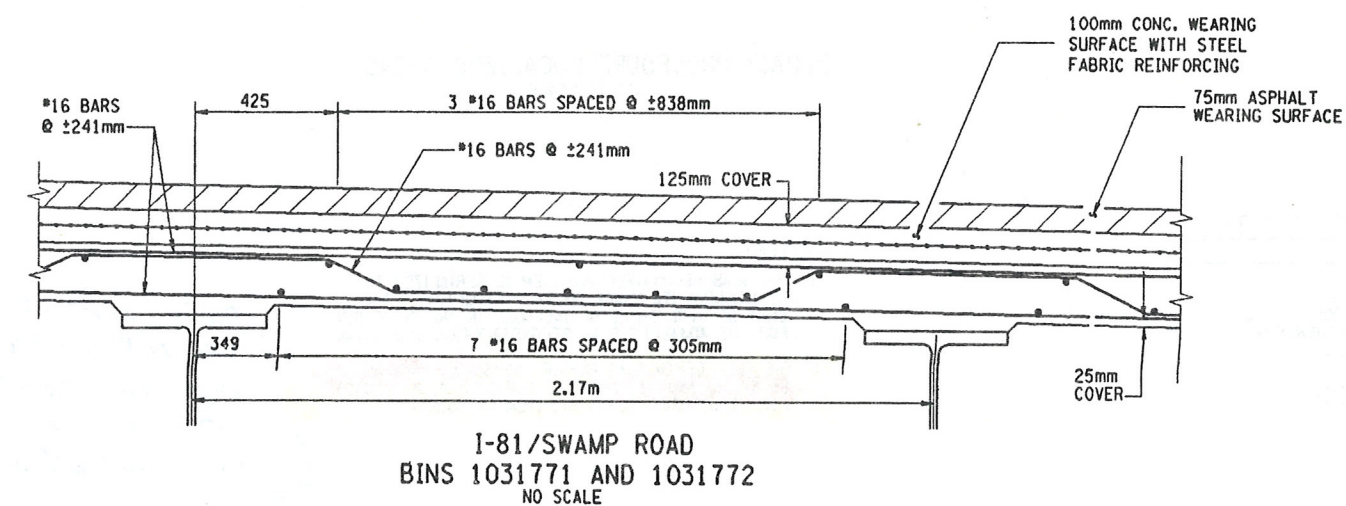
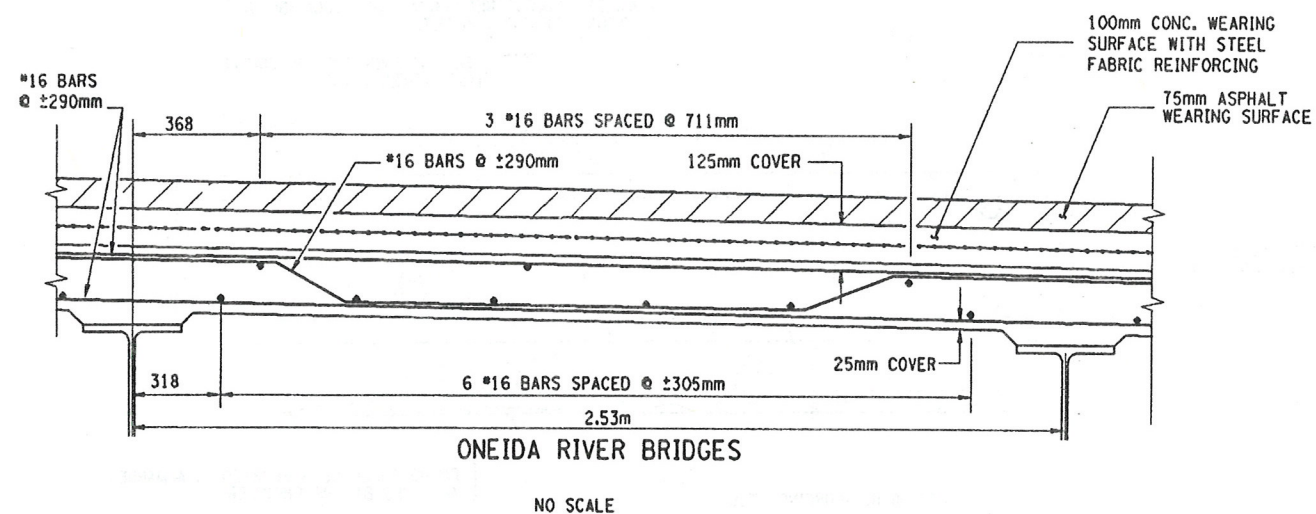
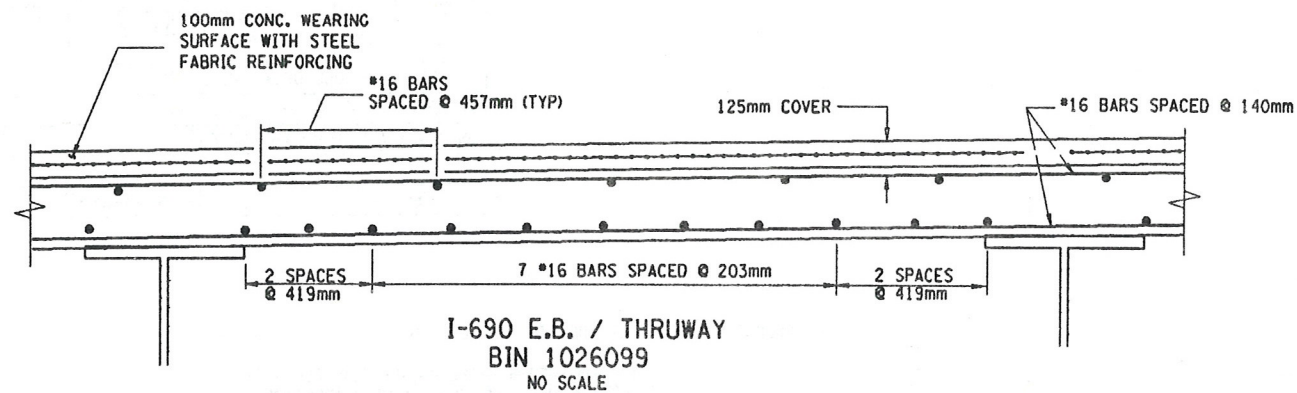
- WELDING NOTES:
1. WELDER SHALL BE QUALIFIED IN ACCORDANCE WITH THE "NEW YORK STATE STEEL CONSTRUCTION MANUAL."
 2. FOR WELDING DETAILS SEE SECTION 7 OF THE "NEW YORK STATE STEEL CONSTRUCTION MANUAL."
 3. MECHANICAL SPLICES SHALL BE USED IN ALL CASES OTHER THAN LAPPED TIED SPLICES.

LAPPED, WELDED SPLICE NOT TO SCALE

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED AS BUILT REVISIONS			
SIGNATURE		DATE	
DETAILS FOR STRUCTURAL SLAB OVERLAY REPAIR PREPARATION			
STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION			
FILENAME	REGION	DATE	DRAWING NO.
380406SS.W1A	3	12/99	SS-1

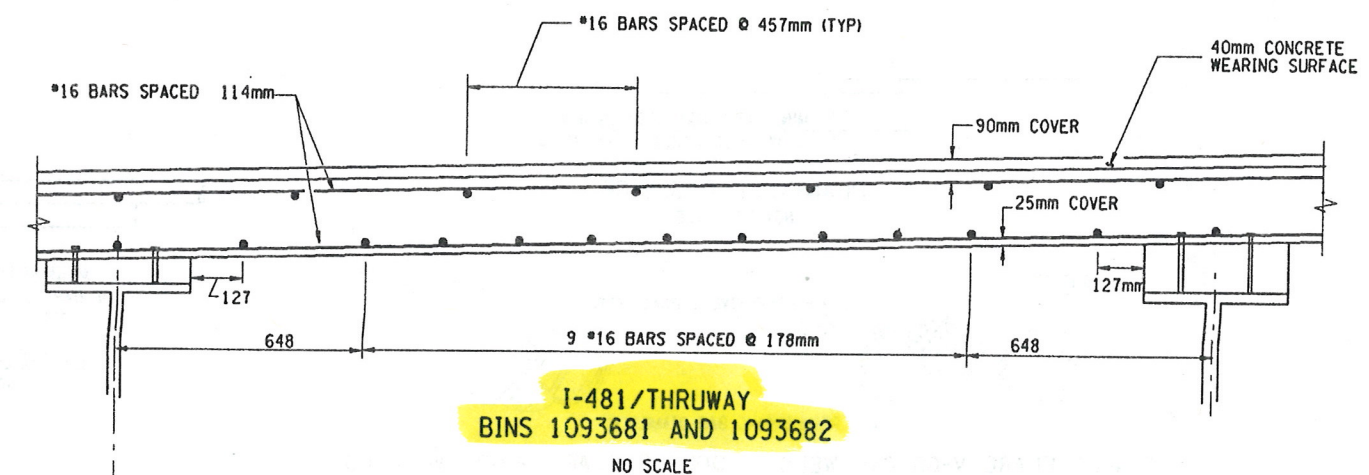
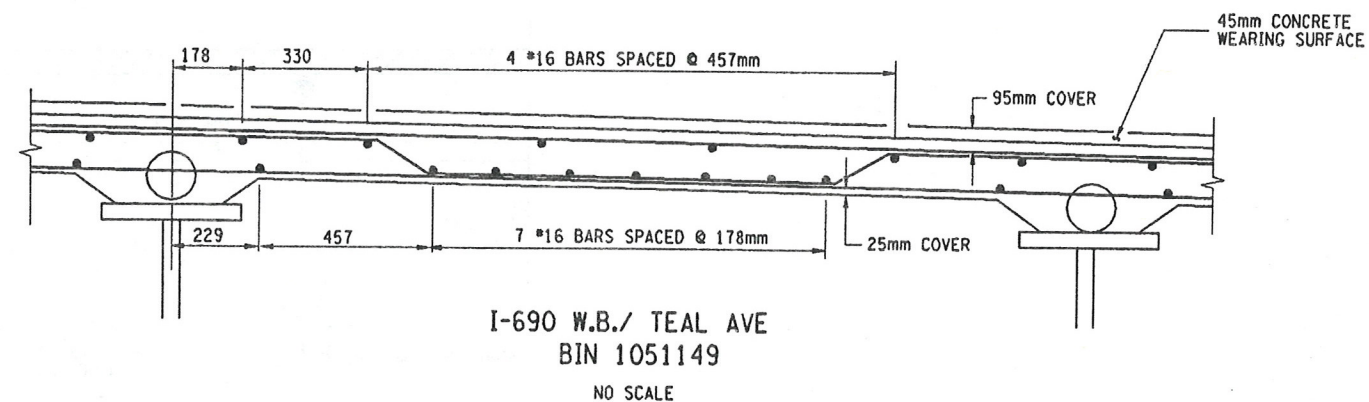
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JOB MANAGER
DESIGN SUPERVISOR
USER = gahuba

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DESIGNED BY
JOB MANAGER
DESIGN SUPERVISOR



- BIN 1051139 NOTES:
1. SPAN 15 SPACING VARIES, 315mm TO 420mm
 2. SPAN 14 SPACING VARIES, 225mm TO 260mm
 3. SPAN 15 SPACING VARIES 178mm TO 298mm
 3. SPAN 15 SPACING IS 114mm @ EAST END ONLY

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D258367	132	354
INTERSTATE BRIDGE DECK REPAIR PROJECT				
VARIOUS LOCATIONS ON I-81, I-690 AND I-481				
ONONDAGA AND OSWEGO COUNTIES				
P.I.N. 3804.06			B.I.N. VARIOUS	



ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED
AS BUILT REVISIONS

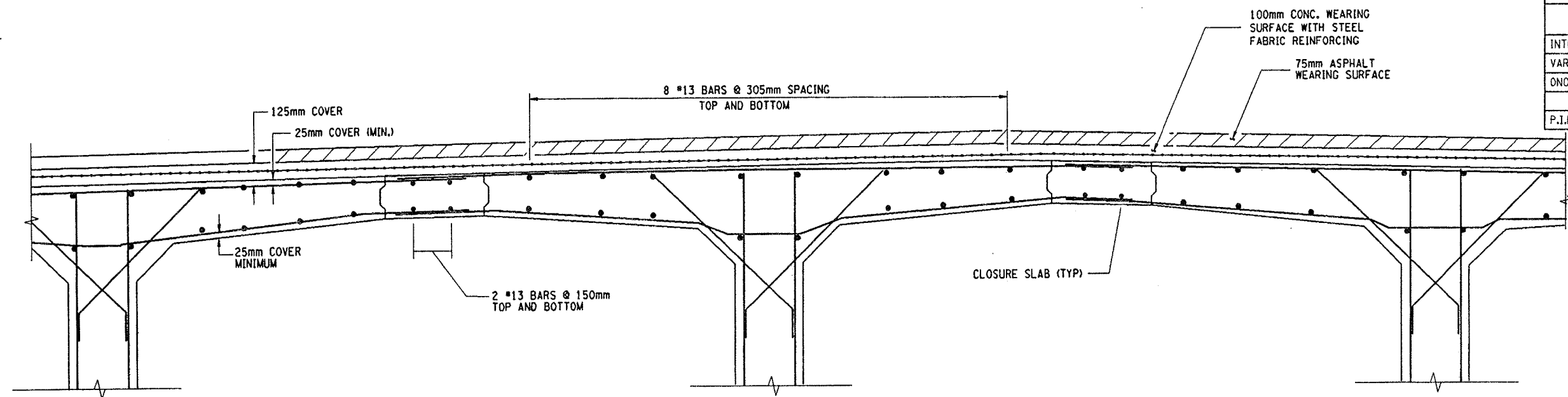
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EXISTING DECK REINFORCING DETAILS

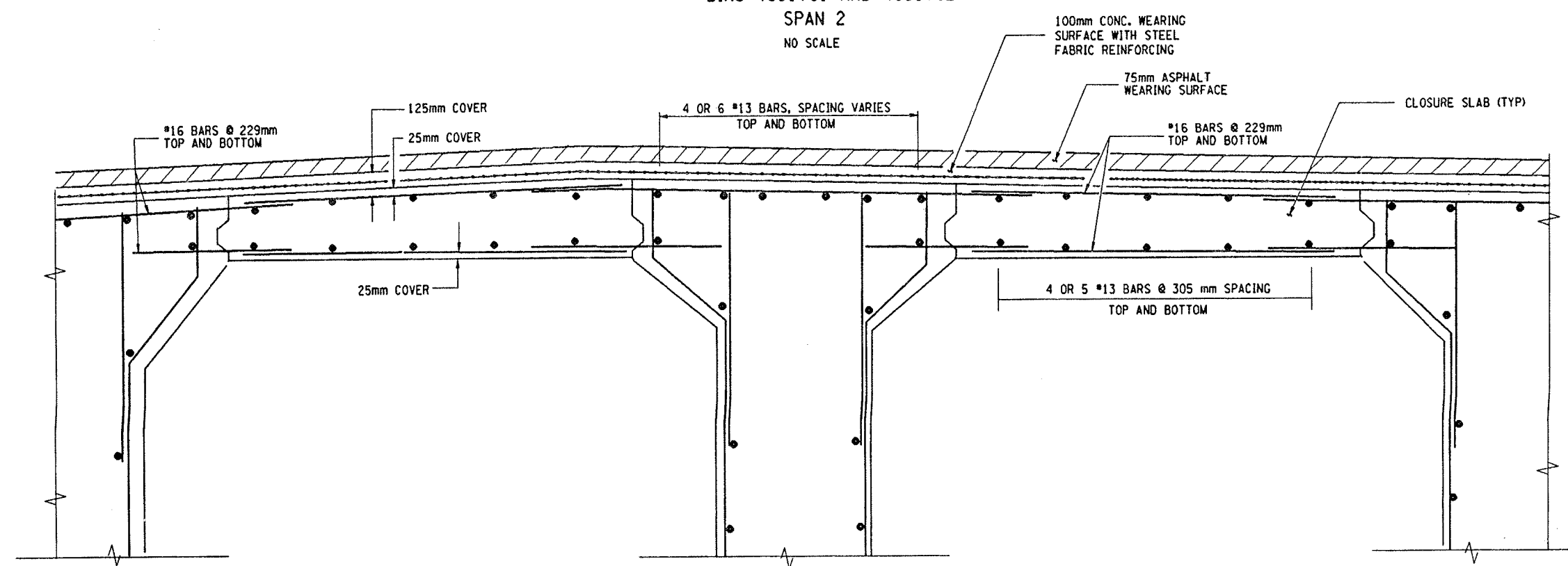
STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME 380406RB.M1A	REGION 3	DATE 1/00	DRAWING NO. SS-2
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FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D258367	133	354
INTERSTATE BRIDGE DECK OVERLAY PROJECT				
VARIOUS BRIDGES ON I-690, I-81 AND I-481				
ONONDAGA AND OSWEGO COUNTIES				
P.I.N. 3804.06		B.I.N. 4031761 & 2		



I-81 OVER ONEIDA LAKE/BARGE CANAL
BINS 4031761 AND 4031762
SPAN 2
NO SCALE



I-81 OVER ONEIDA LAKE/BARGE CANAL
BINS 4031761 AND 4031762
SPANS 1 & 3
NO SCALE

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED
AS BUILT REVISIONS

SIGNATURE _____ DATE _____

EXISTING DECK REINFORCING DETAILS

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME 380406RB.M1A	REGION 3	DATE 1/00	DRAWING NO. SS-3
--------------------------	-------------	--------------	---------------------

DESIGN SUPERVISOR _____ JOB MANAGER _____ DESIGNED BY _____ CHECKED BY _____ ESTIMATED BY _____ DRAFTED BY _____ CHECKED BY _____

USER = DONUSERNAME

N SUPERVISOR

MARK	NO.	LENGTH	TYPE	WEIGHT	A	B	C	D	E	F	G	H H ₁	H ₂	J	K K ₁	K ₂	L	O
BIN 1051149 - JOINTS (STAGE I)																		
W. ABUT. JOINT																		
16SS1	26	0.42m	17	17 kg		0.21m	0.21m	0										
16SS2	2	7.47m	N1	23 kg														7.47m
E. ABUT. JOINT																		
16SS1	26	0.42m	17	17 kg		0.21m	0.21m	0										
16SS2	2	7.47m	N1	23 kg														7.47m
				80 kg	THIS POUR													
BIN 1051149 - JOINTS (STAGE II)																		
W. ABUT. JOINT																		
16SS1	28	0.42m	17	18 kg		0.21m	0.21m	0										
16SS2	2	8.16m	N1	25 kg														8.16m
E. ABUT. JOINT																		
16SS1	28	0.42m	17	18 kg		0.21m	0.21m	0										
16SS2	2	8.16m	N1	25 kg														8.16m
				86 kg	THIS POUR													
MISC. SLAB REPAIR																		
16SD1	—	10.0m	N1	16 kg	LENGTH VARIES ACCORDING TO NEED													
SUBTOTAL UNCOATED BARS: 182 kg																		
BIN 1093681 - JOINTS (STAGE I)																		
S. ABUT. JOINT																		
16SS1	24	0.42m	17	16 kg		0.21m	0.21m	0										
16SS2	2	7.24m	N1	22 kg														7.24m
PIER #1 JOINT																		
16SS1	26	0.42m	17	17 kg		0.21m	0.21m	0										
16SS2	2	7.78m	N1	24 kg														7.78m
N. ABUT. JOINT																		
16SS1	28	0.42m	17	18 kg		0.21m	0.21m	0										
16SS2	2	8.31m	N1	26 kg														8.31m
				123 kg	THIS POUR													
BIN 1093681 - JOINTS (STAGE II)																		
S. ABUT. JOINT																		
16SS1	24	0.42m	17	16 kg		0.21m	0.21m	0										
16SS2	2	7.24m	N1	22 kg														7.24m
PIER #1 JOINT																		
16SS1	26	0.42m	17	17 kg		0.21m	0.21m	0										
16SS2	2	7.78m	N1	24 kg														7.78m
N. ABUT. JOINT																		
16SS1	28	0.42m	17	18 kg		0.21m	0.21m	0										
16SS2	2	8.31m	N1	26 kg														8.31m
				123 kg	THIS POUR													
MISC. SLAB REPAIR																		
16SD1	—	10.0m	N1	16 kg	LENGTH VARIES ACCORDING TO NEED													
SUBTOTAL UNCOATED BARS: 262 kg																		
BIN 1093682 - JOINTS (STAGE I)																		
S. ABUT. JOINT																		
16SS1	16	0.42m	17	10 kg		0.21m	0.21m	0										
16SS2	2	4.88m	N1	15 kg														4.88m
PIER JOINT																		
16SS1	16	0.42m	17	10 kg		0.21m	0.21m	0										
16SS2	2	4.88m	N1	15 kg														4.88m
N. ABUT. JOINT																		
16SS1	16	0.42m	17	10 kg		0.21m	0.21m	0										
16SS2	2	4.88m	N1	15 kg														4.88m
				75 kg	- THIS POUR													

MARK	NO.	LENGTH	TYPE	WEIGHT	A	B	C	D	E	F	G	H H ₁	H ₂	J	K K ₁	K ₂	L	O
BIN 1093682 - JOINTS (STAGE II)																		
S. ABUT. JOINT																		
16SS1	10	0.42m	17	7 kg		0.21m	0.21m	0										
16SS2	2	2.74m	N1	9 kg														2.74m
PIER JOINT																		
16SS1	10	0.42m	17	7 kg		0.21m	0.21m	0										
16SS2	2	2.74m	N1	9 kg														2.74m
N. ABUT. JOINT																		
16SS1	10	0.42m	17	7 kg		0.21m	0.21m	0										
16SS2	2	2.74m	N1	9 kg														2.74m
				48 kg	THIS POUR													
BIN 1093682 - JOINTS (STAGE III)																		
S. ABUT. JOINT																		
16SS1	16	0.42m	17	10 kg		0.21m	0.21m	0										
16SS2	2	4.88m	N1	15 kg														4.88m
PIER JOINT																		
16SS1	16	0.42m	17	10 kg		0.21m	0.21m	0										
16SS2	2	4.88m	N1	15 kg														4.88m
N. ABUT. JOINT																		
16SS1	16	0.42m	17	10 kg		0.21m	0.21m	0										
16SS2	2	4.88m	N1	15 kg														4.88m
				75 kg	THIS POUR													
MISC. SLAB REPAIR																		
16SD1	—	10.0m	N1	16 kg	LENGTH VARIES ACCORDING TO NEED													
SUBTOTAL UNCOATED BARS: 214 kg																		
BIN 4031761 - JOINTS (STAGE I)																		
S. ABUT. JOINT																		
16SS1	16	0.42m	17	10 kg		0.21m	0.21m	0										
16SS2	2	4.88m	N1	15 kg														4.88m
BIN 4031761 - JOINTS (STAGE II)																		
S. ABUT. JOINT																		
16SS1	8	0.42m	17	5 kg		0.21m	0.21m	0										
16SS2	2	2.44m	N1	8 kg														2.44m
BIN 4031761 - JOINTS (STAGE III)																		
S. ABUT. JOINT																		
16SS1	16	0.42m	17	10 kg		0.21m	0.21m	0										
16SS2	2	4.88m	N1	15 kg														4.88m
MID-SPAN GIRDER REPAIR																		
10MS1	12	0.85m	17	16 kg		0.18m	0.49m	0.18m										
SUBTOTAL UNCOATED BARS: 79 kg																		
BIN 4031762 - JOINTS (STAGE I)																		
S. ABUT. JOINT																		
16SS1	16	0.42m	17	10 kg		0.21m	0.21m	0										
16SS2	2	4.88m	N1	15 kg														4.88m
BIN 4031762 - JOINTS (STAGE II)																		
16SS1	8	0.42m	17	5 kg		0.21m	0.21m	0										
16SS2	2	2.44m	N1	8 kg														2.44m
BIN 4031762 - JOINTS (STAGE III)																		
S. ABUT. JOINT																		
16SS1	16	0.42m	17	10 kg		0.21m	0.21m	0										
16SS2	2	4.88m	N1	15 kg														4.88m
MID-SPAN GIRDER REPAIR																		
10MS1	12	0.85m	17	16 kg		0.18m	0.49m	0.18m										
SUBTOTAL UNCOATED BARS: 79 kg																		
TOTAL UNCOATED BARS - 6850 kg																		
TOTAL EPOXY BARS - 3840 kg																		

ALL DIMENSIONS ARE IN m UNLESS OTHERWISE NOTED

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D258367	137	354
INTERSTATE BRIDGE DECK OVERLAY PROJECT				
VARIOUS BRIDGES ON I-81, I-690 AND I-481				
ONONDAGA AND OSWEGO COUNTIES				
P.I.N. 3804.06		B.I.N. VARIOUS		

♦ DENOTES AVERAGE LENGTH

(N1)

(17)

AS BUILT REVISIONS			
SIGNATURE	DATE		
<p>BAR LIST SHEET 4 OF 4</p>			
<p>STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION</p>			
FILENAME 380406AA.B1A	REGION 3	DATE 12/99	DRAWING NO. 8L-4

Bridge Rehabilitation

BIN 1093562

I-81 (Former I-481) NB over Manlius Center Road (Route 290)

BIN 1093562

Location: I-481 NB over Manlius Center Road (Route 290)
NYSDOT D031085 PIN 3501.60 - I-81 Viaduct Replacement or New Urban Arterial
City of Syracuse, Onondaga County
Bridge Asbestos Assessment Results

Asbestos containing materials have been identified on this bridge.

ITEM	DESCRIPTION	QUANTITY
210.481201	Removal and Disposal of Miscellaneous ACM (BV14) – Sheet Packing	112 SQ FT

The following summarizes the results of the most recent asbestos survey and record plan review.

Watts Inspection Findings (February 2014)

A bridge inspection was completed on 2/25/2014 and the following suspect ACMs were identified and sampled:

- Green girder paint
- Thin beige/grey abutment wall paint on lower part of abutments
- Thick beige/grey paint at top part of abutments
- Bearing pad
- **Compressed asbestos sheet packing**

Laboratory analysis indicated that the sheet packing sampled by Watts was confirmed positive for asbestos.

Review of Bridge Record Plans

The record plans (FISH 70-7 and D259214) in support of this project. No suspect materials were identified. NYSDOT no longer considers Type D waterstop a suspect material.

Asbestos Survey Results

A previous asbestos survey completed by LaBella in 1999 was reviewed in support of this project.

- Green bridge paint
- **Compressed asbestos sheet packing**
- Grey masonry coating

Laboratory analysis indicated that the sheet packing was confirmed positive for asbestos.

**EMSL Analytical, Inc.**

490 Rowley Road, Depew, NY 14043

Phone/Fax: (716) 651-0030 / (716) 651-0394

<http://www.EMSL.com>buffalolab@emsl.com

EMSL Order: 141400852

CustomerID: WATT50A

CustomerPO:

ProjectID:

Attn: **Scott Matthews**
Watts Architecture & Engineering
2610 Salina Street
Syracuse, NY 13205

Phone: (315) 443-8611
Fax: (315) 443-8605
Received: 03/03/14 10:00 AM
Analysis Date: 3/7/2014
Collected: 2/25/2014

Project: 13092 - I-81 Viaduct Replacement or New Urban Renewal Bin 1093562 - 481 NB Over Manlius Center Rd

Test Report:Asbestos Analysis of Bulk Material

Test	Analyzed Date	Color	Non Asbestos		Asbestos
			Fibrous	Non-Fibrous	
Sample ID 1093562-1 141400852-0001		Description Homogeneity	green girder paint Homogeneous		
PLM NYS 198.1 Friable					Not Analyzed
PLM NYS 198.6 VCM					Not Analyzed
PLM NYS 198.6 NOB	3/6/2014	Green			Inconclusive: None Detected
TEM NYS 198.4 NOB	3/7/2014	Green			None Detected
Sample ID 1093562-2 141400852-0002		Description Homogeneity	green girder paint Homogeneous		
PLM NYS 198.1 Friable					Not Analyzed
PLM NYS 198.6 VCM					Not Analyzed
PLM NYS 198.6 NOB	3/6/2014	Green			Inconclusive: None Detected
TEM NYS 198.4 NOB	3/7/2014	Green			None Detected
Sample ID 1093562-3 141400852-0003		Description Homogeneity	green girder paint Homogeneous		
PLM NYS 198.1 Friable					Not Analyzed
PLM NYS 198.6 VCM					Not Analyzed
PLM NYS 198.6 NOB	3/6/2014	Green			Inconclusive: None Detected
TEM NYS 198.4 NOB	3/7/2014	Green			None Detected
Sample ID 1093562-4 141400852-0004		Description Homogeneity	grey/beige paint on masonry abutment wall thin - coat Homogeneous		
PLM NYS 198.1 Friable					Not Analyzed
PLM NYS 198.6 VCM					Not Analyzed
PLM NYS 198.6 NOB	3/6/2014	Gray			Inconclusive: None Detected
TEM NYS 198.4 NOB	3/7/2014	Gray			None Detected
Sample ID 1093562-5 141400852-0005		Description Homogeneity	grey/beige paint on masonry abutment wall thin - coat Homogeneous		
PLM NYS 198.1 Friable					Not Analyzed
PLM NYS 198.6 VCM					Not Analyzed
PLM NYS 198.6 NOB	3/6/2014	Gray			Inconclusive: None Detected
TEM NYS 198.4 NOB	3/7/2014	Gray			None Detected

**EMSL Analytical, Inc.**

490 Rowley Road, Depew, NY 14043

Phone/Fax: (716) 651-0030 / (716) 651-0394

<http://www.EMSL.com>buffalolab@emsl.com

EMSL Order: 141400852
CustomerID: WATT50A
CustomerPO:
ProjectID:

Test Report:Asbestos Analysis of Bulk Material

		Non Asbestos		
Test		Color	Fibrous	Asbestos
Sample ID	1093562-6	Description	grey/beige paint on masonry abutment wall thin - coat	
	141400852-0006	Homogeneity	Homogeneous	
PLM NYS 198.1 Friable				Not Analyzed
PLM NYS 198.6 VCM				Not Analyzed
PLM NYS 198.6 NOB	3/6/2014	Gray		Inconclusive: None Detected
TEM NYS 198.4 NOB	3/7/2014	Gray		None Detected
Sample ID	1093562-7	Description	grey/beige paint on top of abutment wall thick - coat	
	141400852-0007	Homogeneity	Homogeneous	
PLM NYS 198.1 Friable				Not Analyzed
PLM NYS 198.6 VCM				Not Analyzed
PLM NYS 198.6 NOB	3/6/2014	Gray		Inconclusive: None Detected
TEM NYS 198.4 NOB	3/7/2014	Gray		None Detected
Sample ID	1093562-8	Description	grey/beige paint on top of abutment wall thick - coat	
	141400852-0008	Homogeneity	Homogeneous	
PLM NYS 198.1 Friable				Not Analyzed
PLM NYS 198.6 VCM				Not Analyzed
PLM NYS 198.6 NOB	3/6/2014	Gray		Inconclusive: None Detected
TEM NYS 198.4 NOB	3/7/2014	Gray		None Detected
Sample ID	1093562-9	Description	grey/beige paint on top of abutment wall thick - coat	
	141400852-0009	Homogeneity	Homogeneous	
PLM NYS 198.1 Friable				Not Analyzed
PLM NYS 198.6 VCM				Not Analyzed
PLM NYS 198.6 NOB	3/6/2014	Gray		Inconclusive: None Detected
TEM NYS 198.4 NOB	3/7/2014	Gray		None Detected
Sample ID	1093562-10	Description	bearing pad	
	141400852-0010	Homogeneity	Homogeneous	
PLM NYS 198.1 Friable				Not Analyzed
PLM NYS 198.6 VCM				Not Analyzed
PLM NYS 198.6 NOB	3/6/2014	Brown		Inconclusive: None Detected
TEM NYS 198.4 NOB	3/7/2014	Brown		None Detected
Sample ID	1093562-11	Description	bearing pad	
	141400852-0011	Homogeneity	Homogeneous	
PLM NYS 198.1 Friable				Not Analyzed
PLM NYS 198.6 VCM				Not Analyzed
PLM NYS 198.6 NOB	3/6/2014	Brown		Inconclusive: None Detected
TEM NYS 198.4 NOB	3/7/2014	Brown		None Detected

**EMSL Analytical, Inc.**

490 Rowley Road, Depew, NY 14043

Phone/Fax: (716) 651-0030 / (716) 651-0394

<http://www.EMSL.com>buffalolab@emsl.com

EMSL Order: 141400852

CustomerID: WATT50A

CustomerPO:

ProjectID:

Test Report:Asbestos Analysis of Bulk Material

		Non Asbestos		Asbestos
Test		Color	Fibrous	
Sample ID	1093562-12	Description	bearing pad	
	141400852-0012	Homogeneity	Homogeneous	
PLM NYS 198.1 Friable				Not Analyzed
PLM NYS 198.6 VCM				Not Analyzed
PLM NYS 198.6 NOB	3/6/2014	Brown		Inconclusive: None Detected
TEM NYS 198.4 NOB	3/7/2014	Brown		None Detected
Sample ID	1093562-13	Description	sheet packing	
	141400852-0013	Homogeneity	Homogeneous	
PLM NYS 198.1 Friable				Not Analyzed
PLM NYS 198.6 VCM				Not Analyzed
PLM NYS 198.6 NOB	3/6/2014	Gray		14.3% Chrysotile 14.3% Total
TEM NYS 198.4 NOB	3/7/2014			Not Analyzed
Sample ID	1093562-14	Description	sheet packing	
	141400852-0014	Homogeneity	Homogeneous	
PLM NYS 198.1 Friable				Not Analyzed
PLM NYS 198.6 VCM				Not Analyzed
PLM NYS 198.6 NOB	3/6/2014	Gray		21.0% Chrysotile 21.0% Total
TEM NYS 198.4 NOB	3/7/2014			Not Analyzed
Sample ID	1093562-15	Description	sheet packing	
	141400852-0015	Homogeneity	Homogeneous	
PLM NYS 198.1 Friable				Not Analyzed
PLM NYS 198.6 VCM				Not Analyzed
PLM NYS 198.6 NOB	3/6/2014	Gray		34.3% Chrysotile 34.3% Total
TEM NYS 198.4 NOB	3/7/2014			Not Analyzed

**EMSL Analytical, Inc.**

490 Rowley Road, Depew, NY 14043

Phone/Fax: (716) 651-0030 / (716) 651-0394

<http://www.EMSL.com>buffalolab@emsl.com

EMSL Order: 141400852

CustomerID: WATT50A

CustomerPO:

ProjectID:

Test Report:Asbestos Analysis of Bulk Material

Test	Color	Non Asbestos		Asbestos
		Fibrous	Non-Fibrous	

Analyst(s)

Rhonda McGeeRhonda McGee, Laboratory Manager
or other approved signatory

NOB = Non Friable Organically Bound N/A = Not Applicable VCM = Vermiculite Containing Material

-In New York State, TEM is currently the only method that can be used to determine if NOB materials can be considered or treated as non-asbestos containing.

All samples examined for the presence of vermiculite when analyzed via NYS 198.1.

-NYS Guidelines for Vermiculite containing samples are available at http://www.wadsworth.org/labcert/elapcert/forms/VermiculiteInterimGuidance_Rev070913.pdf

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. Samples were received in good condition unless otherwise noted.

This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. This report may contain data that is not covered by the NVLAP accreditation.

Samples analyzed by EMSL Analytical, Inc. Depew, NY NYS ELAP 11606

WATTS ARCHITECTURE & ENGINEERING ASBESTOS BULK SAMPLE CHAIN-OF-CUSTODY

 Page: 1 of 2
 Date: 2-25-14

 Client: Parsons Engineering
 Project: I-81 Viaduct Replacement or New Urban Renewal
 Building / Location: BIN 1093562 481 NB over Manlius Center Rd
 Contact: Scott Matthews at (315) 443-8611
 Email Preliminary Results to: smatthews@watts-ae.com
 Mail Invoice to: Accounts Payable
Watts Architecture & Engineering
95 Perry Street, Buffalo, NY 14203

Mail Report to:

 Watts Project No.: 13092
 Turnaround Requested: 3 Hr. 48 Hr.
 Analysis Requested: 6 Hr. 72 Hr.
 PLM X TEM X 12 Hr. X 5 Day
24 Hr. 6-10 Day

Scott Matthews

 Watts Architecture & Engineering
 2610 S Salina Street, Syracuse, NY 13210

12 week asper Matt.

3/3/14

Sample Number	Material Description	Sample Location	Laboratory Results	
			PLM	TEM
1093562-1	Green grider paint	SW corner		
-2	" " "	SE corner		
-3	" " "	NE corner		
-4	Grey/beige paint on masonry abutment wall (thin coat)	SW corner		
-5	" " " "	SE corner		
-6	" " " "	NE corner		
-7	Grey/beige paint on top of abutment (thick coat)	SW corner		
-8	" " " "	SE corner		
-9	" " " "	NE corner		
-10	Bearing Pad	SW corner		
-11	" " "	SE corner		
-12	" " "	NE corner		

Sampled By: Scott MatthewsDate: 2-25-14Received By: FXDate: FXRelinquished By: Scott Matthews to FedExDate: 2-28-14Received By: 10 AMDate: 10 AM

Comments: _____

 RECEIVED
 MAR 03 2014
BY: John

BIN 1093562 Inspection Photos

I-81 (Former I-481) NB over Manlius Center Road (Route 290)

Photo 1



Photo 2



Photo 3



Photo 4

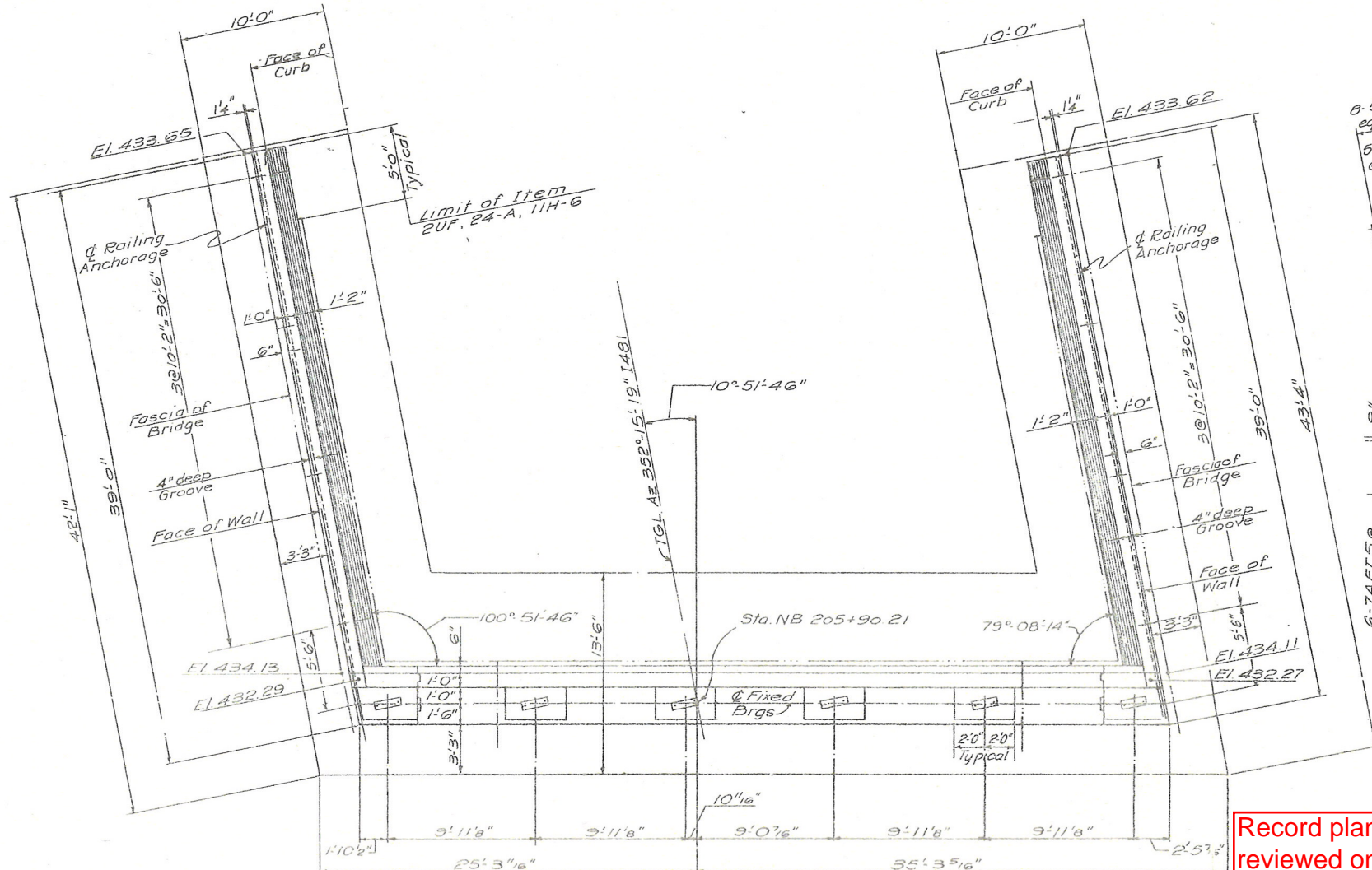


Photo 5



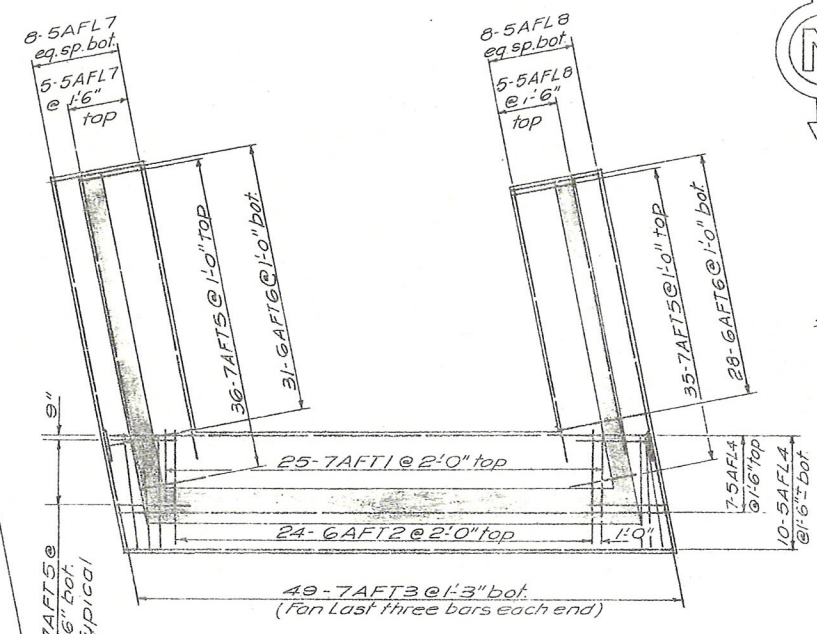
ONONDAGA COUNTY

Opaka 4/20/92
King 3/20/94
Daigles 2/2/96
3/29/10
3/14/10

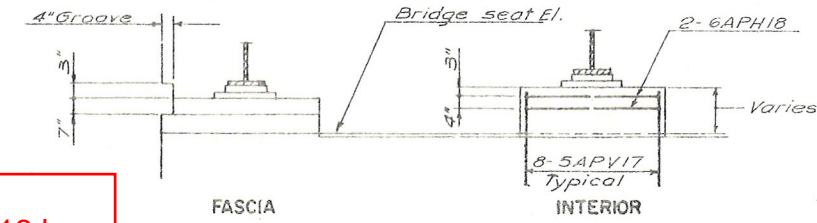


PLAN
Scale 3/16" = 1'-0"

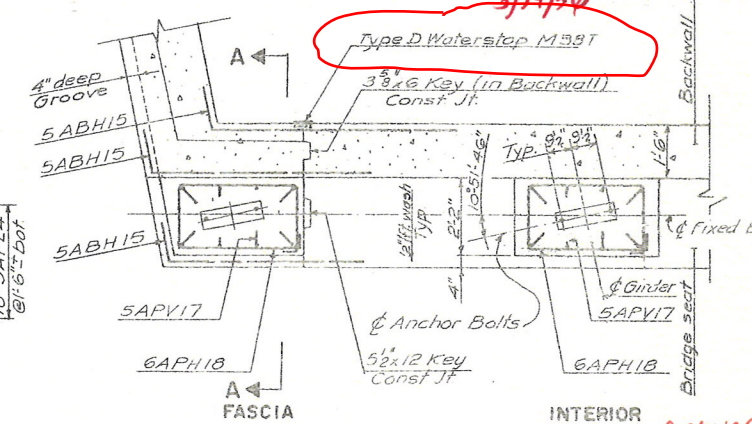
Record plans were reviewed on 12-30-13 by GA. The following suspect material was identified:
Waterstop - pages 1 and 2



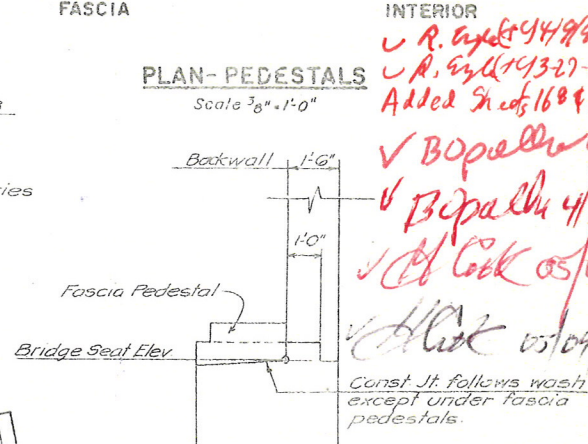
FOOTING REINFORCEMENT
Scale 3/32" = 1'-0"



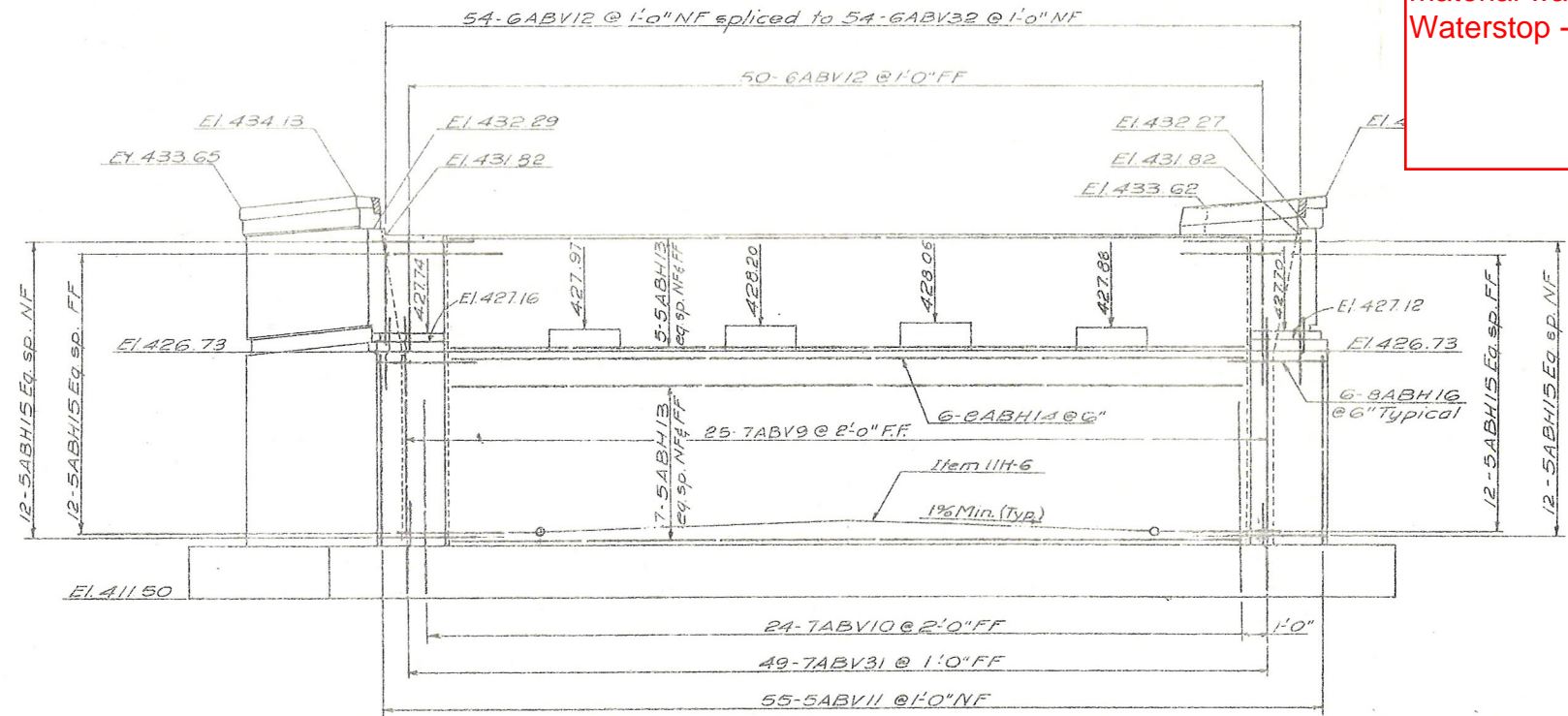
ELEVATION-PEDESTALS
Not to scale



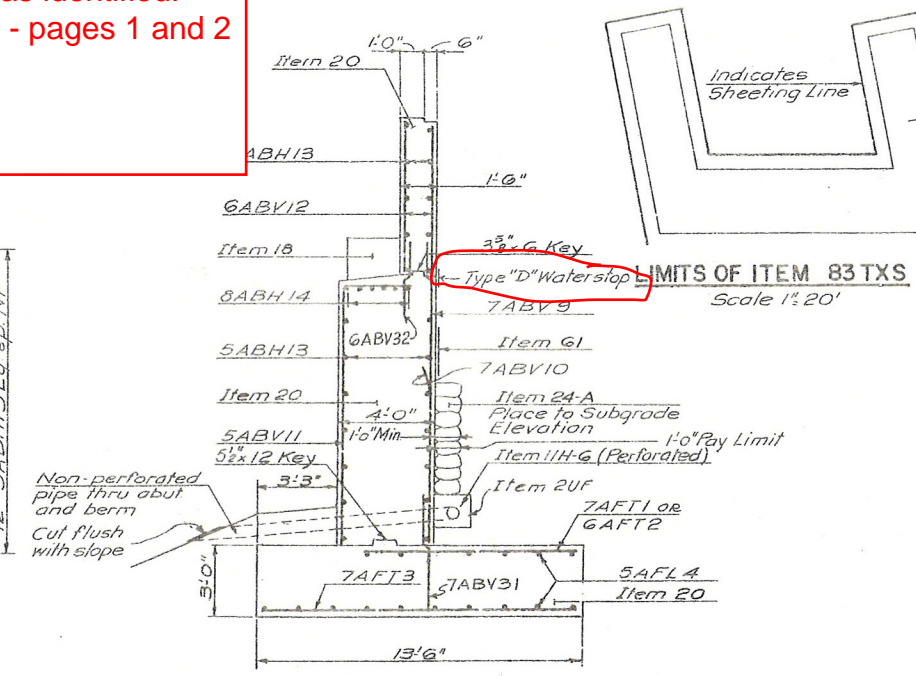
PLAN-PEDESTALS
Scale 3/8" = 1'-0"



SECTION A-A
Scale 3/8" = 1'-0"

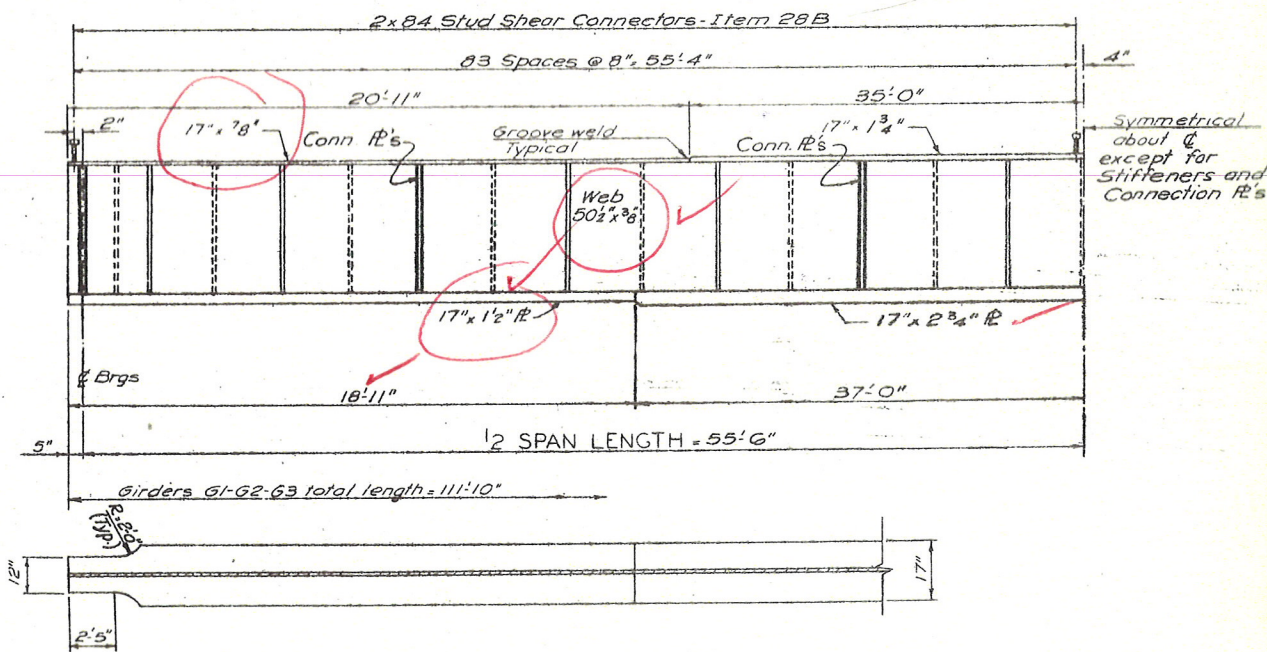
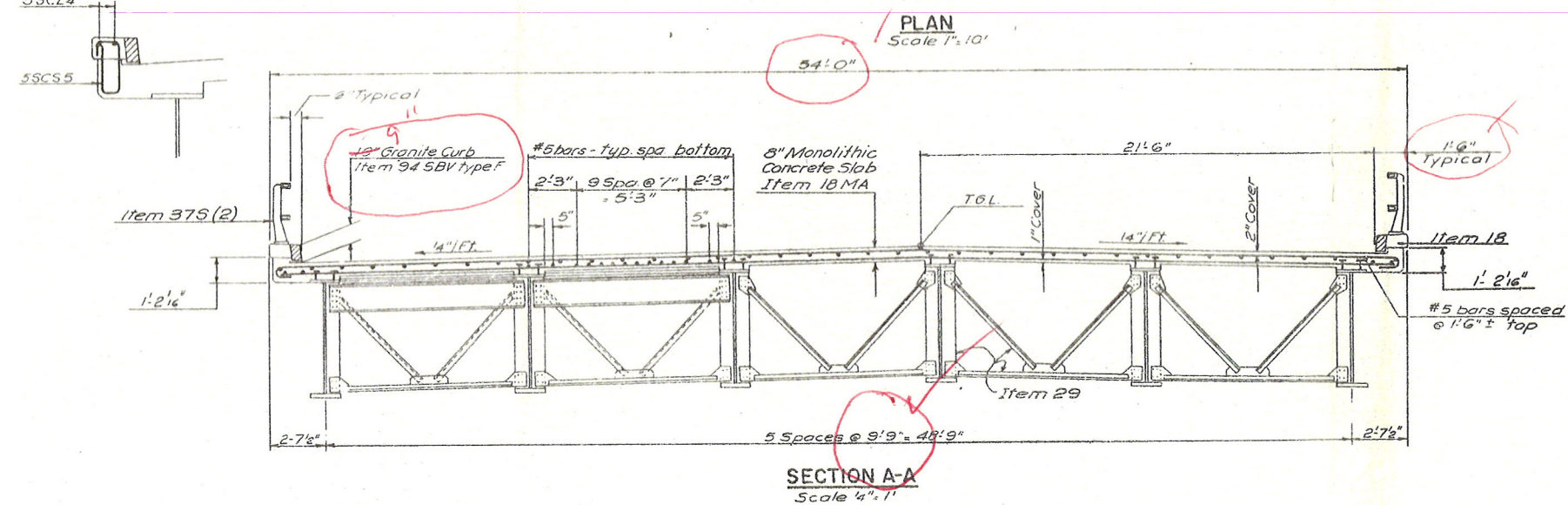
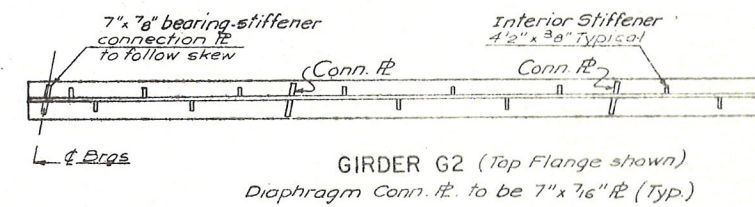
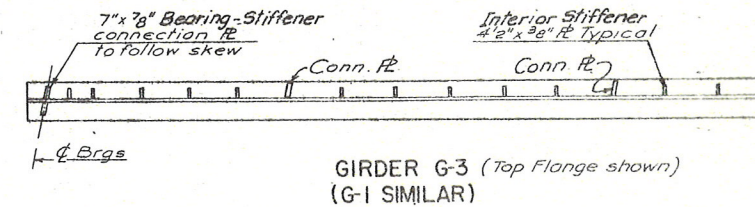
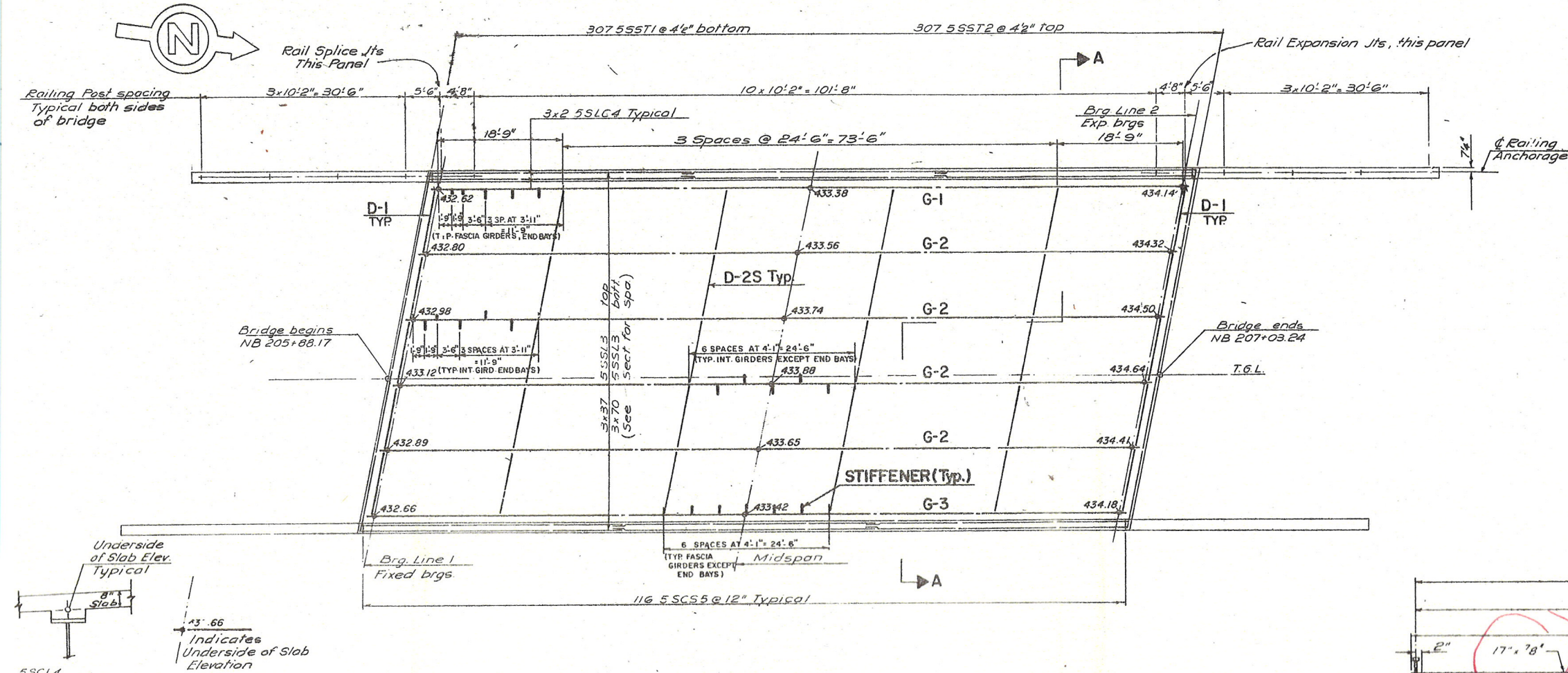


ELEVATION
Scale 3/16" = 1'-0"

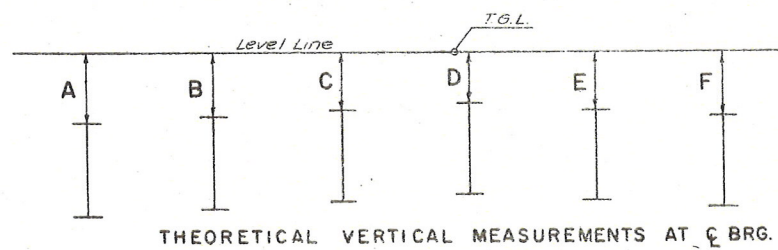


TYPICAL SECTION
Scale 1/4" = 1'-0"

- NOTES:
1. Anchor bolts for bearings shall be 1/4" dia. roughened or swaged bolts, 1'-4 1/2" long and set 12" into concrete.
 2. For Excavation and Backfill details see Sheet No. 128
 3. For Backwall and Waterstop details see Sheet No. 125
 4. For Fixed Bearing detail see Sht. No. 130
 5. For Rail Post spacing see Sheet No. 175

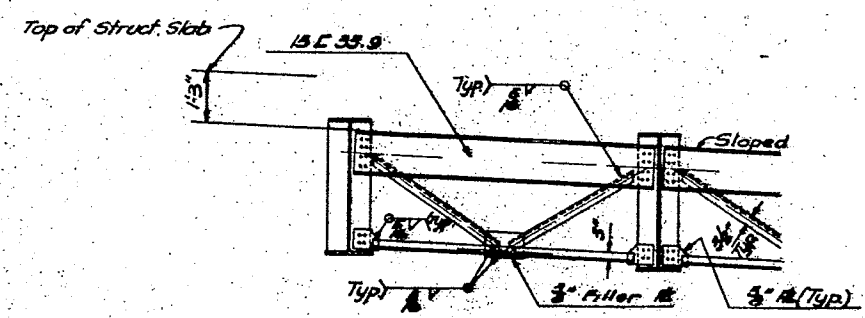


Notes:
1. For detail of diaphragms see sheet 129
2. For weld sizes see sheet 129

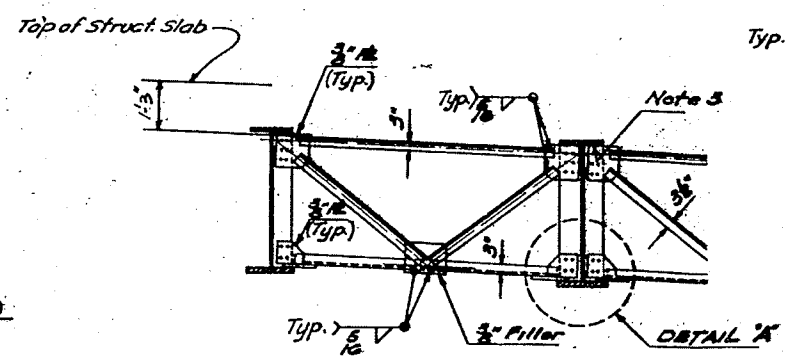


BRG. LINE	VERTICAL MEASUREMENTS TO TOP OF STEEL					
	A	B	C	D	E	F
1	1'-5 1/4"	1'-3 3/8"	1'-1"	11'-5 1/16"	1'-2 1/16"	1'-4 13/16"
2	1'-5 1/4"	1'-3 3/8"	1'-1"	11'-5 1/16"	1'-2 1/16"	1'-4 13/16"

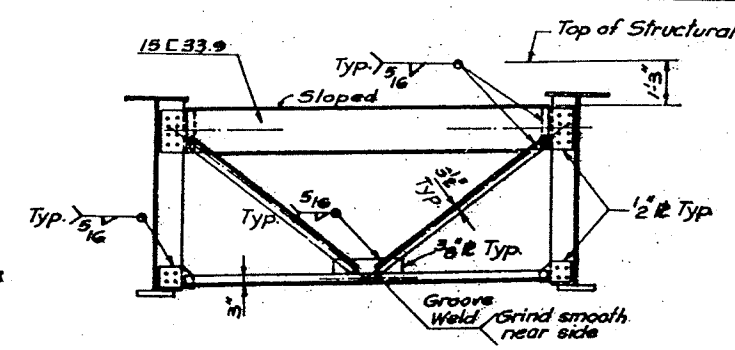
ADJUSTMENT FOR CAMBER		
	FASCIA GIRDER	INTERIOR GIRDER
SLAB CONCRETE	1 13/16"	2 3/8"
V. C.	0"	0"
SUPERIMPOSED DEAD LOAD	7/16"	3/8"
D.L. STEEL ERECTED	1 1/16"	1 1/16"
TOTAL	2 15/16"	3 7/8"



D1-ABUTMENTS
(Curved or Straight Girders)

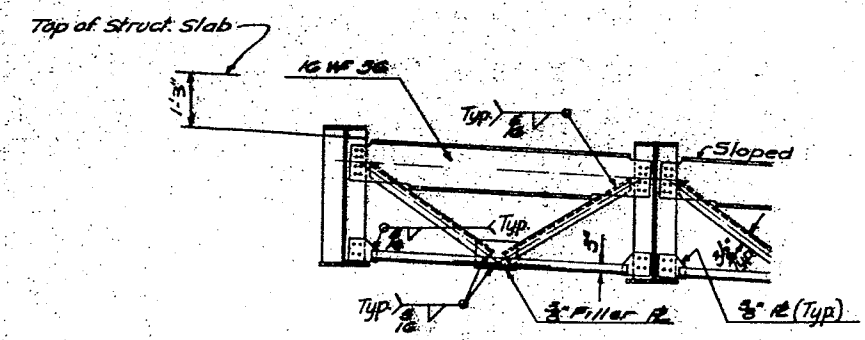
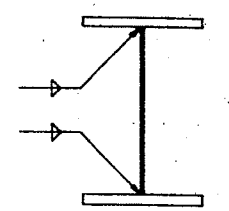


D2C-INTERMEDIATE
(Curved Girders)

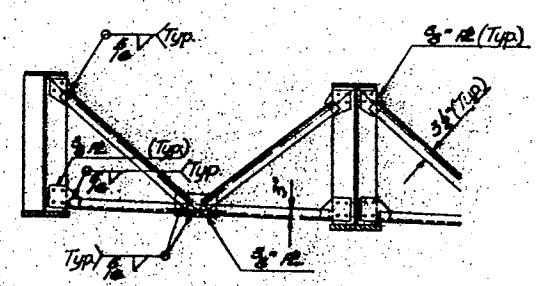


D1S-ABUTMENTS
(Curved Girders)
BRIDGES No. 4 & 9

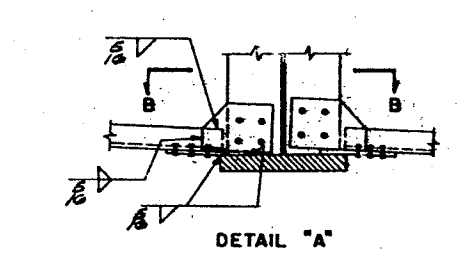
MATERIAL THICKNESS OF THICKER PART JOINED (INCHES)	MINIMUM SIZE OF FILLET WELD (INCHES)
To 1/2	5/16
Over 1/2 to 2 1/2	3/8
Over 2 1/2 to 6	1/2



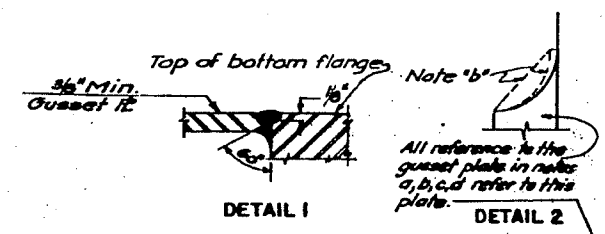
D3-PIERS
(Straight Girders)



D2S-INTERMEDIATE
(Straight Girders)

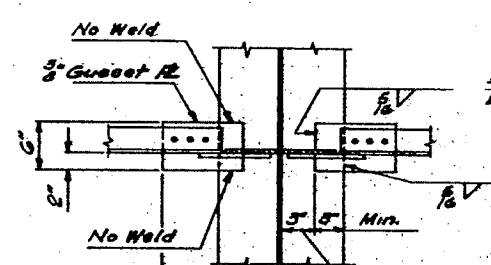


DETAIL "A"

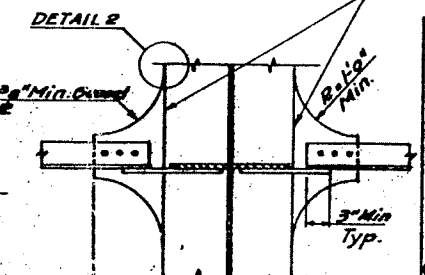


DETAIL 1

DETAIL 2



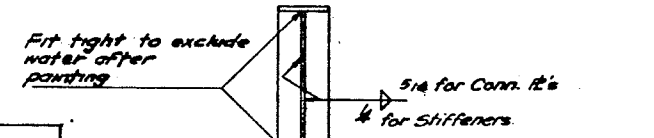
PLAN AT B-B



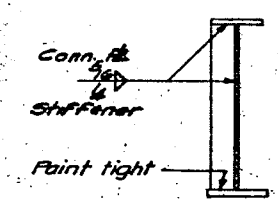
PLAN

ALTERNATE METHOD FOR CONNECTING
BOTTOM BRACING

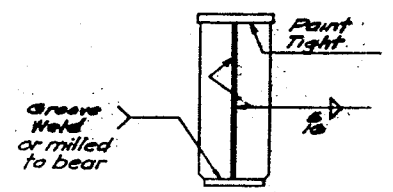
Notes:
a) The gusset plate shall be designed and welded as a single piece. Groove welds shall be used. It shall then be air carbon arc gouged then the second side will be welded. All welding shall be in the flat or down-hand position. See note "Curved Girders" at this sheet.
b) The gusset plate may be of any shape that will provide proper welding, cutting and flange grinding. A smooth transition from the flange edge at a 1/4" radius is required.
c) Both the gusset plate and stiffeners are to be the same type of steel.
d) Field welding to the gusset plate will not be permitted.



STIFFENER OR CONNECTION PLATES
IN PAIR (See Superstructure Note No. 8
Sheet No. 124)



STIFFENER OR CONNECTION
PLATES USE SINGLY (See Superstructure Note No. 9
Sheet No. 124)



BEARING STIFFENERS
CONNECTION PLATES

CONNECTION AND STIFFENER PLATES-COMMON DETAILS

Note: The details on this sheet apply to only the following structures:
Butternut Interchange
Bridges: 4, 5, 6, 7
Butternut Interchange to Callamer
Bridges: 1N & 1S
3N & 3S
4N & 4S
5

THIS SHEET DOES NOT APPLY TO BRIDGES

NOTE:
All bracing angles
3/2 x 3 x 3/8

DIAPHRAGM DETAILS

FABRICATION NOTES

- A. Spans which use built-up girders and are on a curvature of 1500 feet radius or greater shall use the following note: "Built-up girders may be curved by cutting the flanges to the required radius or by the process of heat shrinking. Built-up girders curved by heat shrinking after they are assembled shall not have the intermediate stiffeners and connection plates welded to the compression flange until the curving process has been completed".
B. Spans which use built-up girders and are on a curvature of less than 1500 feet radius shall use the following note: "All built-up girders shall be curved by cutting the flanges to the required radius".
- All connection plates for diaphragms shall be 7" x 14" plates except as otherwise indicated. These plates shall be attached to webs with continuous welds so as to develop their full strength as per Specifications of the American Welding Society. Where holes are indicated on the drawings these connections shall be made with 1/8" diameter rivets or high strength bolts. Holes may be omitted and welding substituted if the Contractor so elects. Amount of welding used shall be equivalent in strength to the rivets or bolts.
- On curved structures, the connection plates for diaphragms shall be welded to the top flange by a 1/4" deep weld all around.

CURVED GIRDERS

Stiffeners or connection plates shall be attached to webs after the gusset plate is welded in place. Care shall be taken to insure that the stiffeners or connection plates are attached to the webs and not the flanges. The stiffeners or connection plates shall be attached to the webs by a 1/4" deep weld all around.

D251436

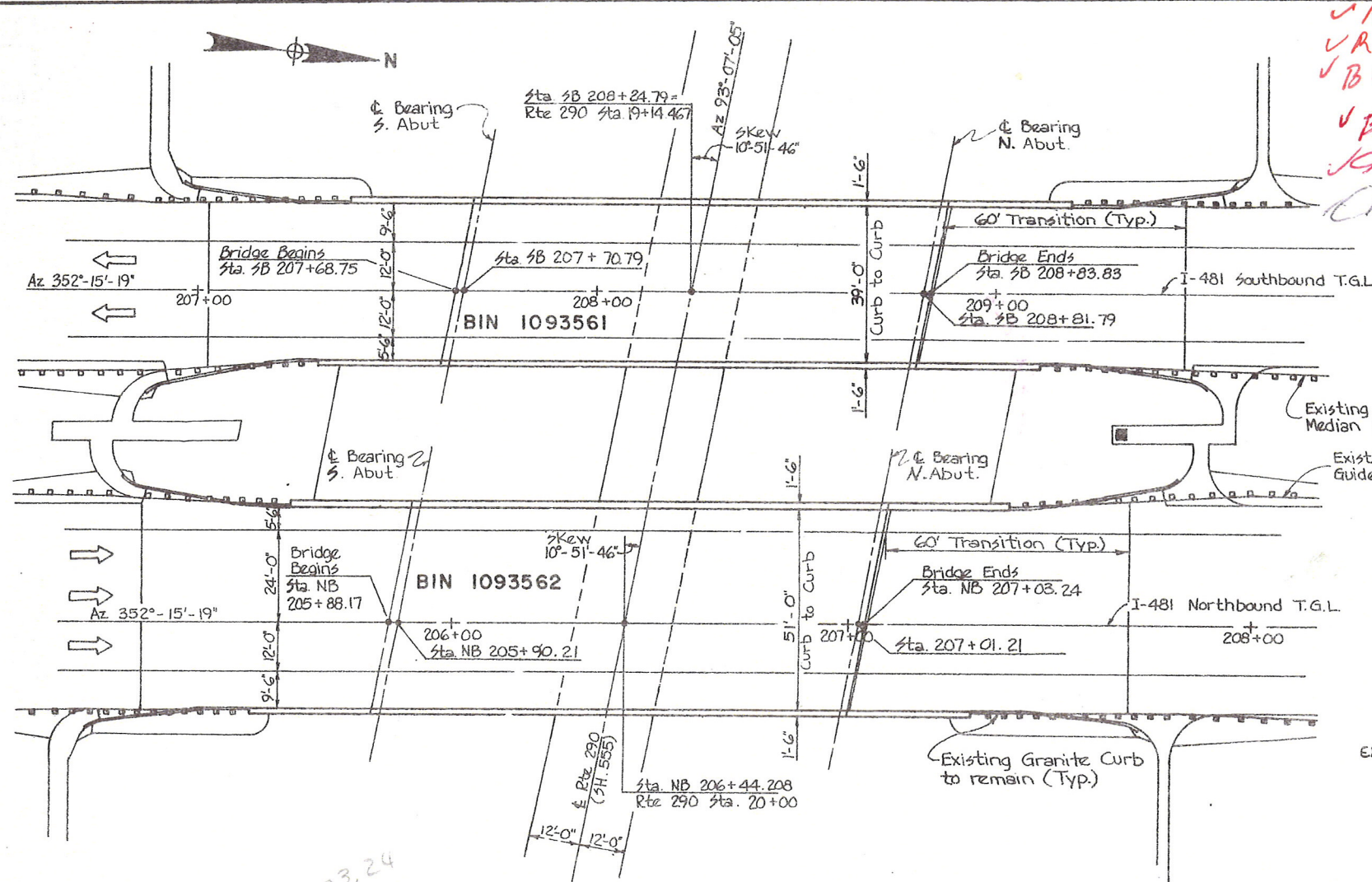
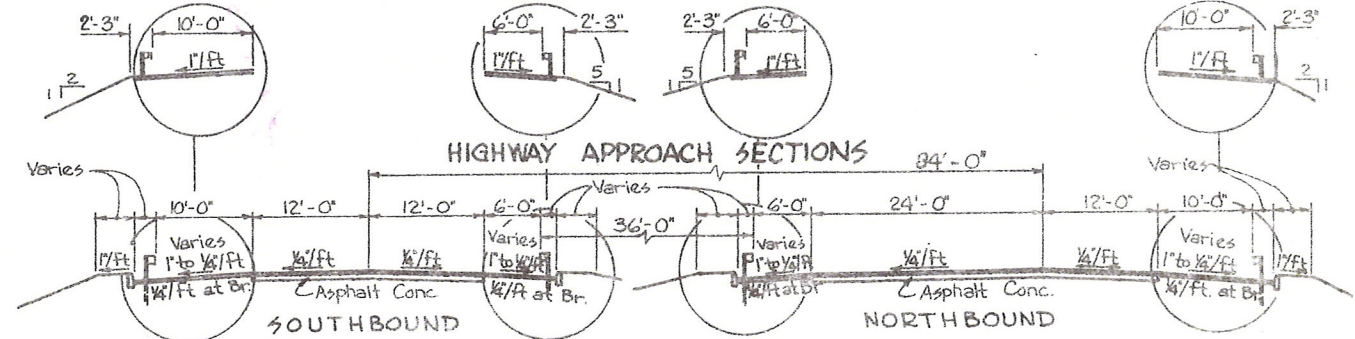
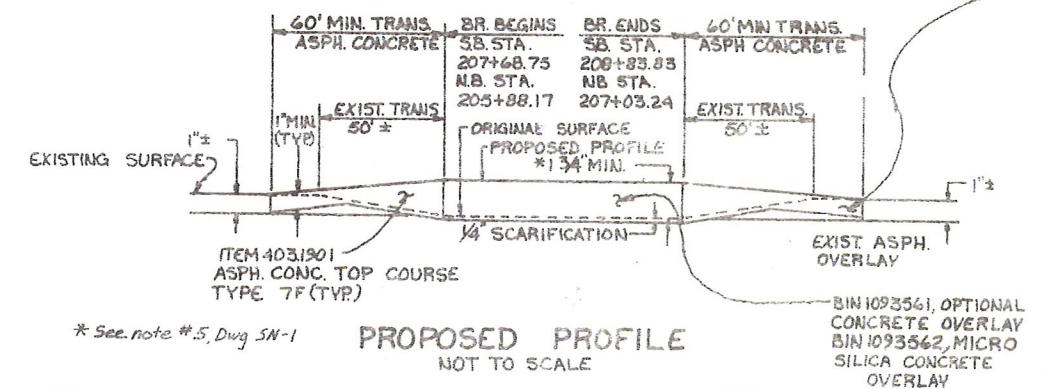
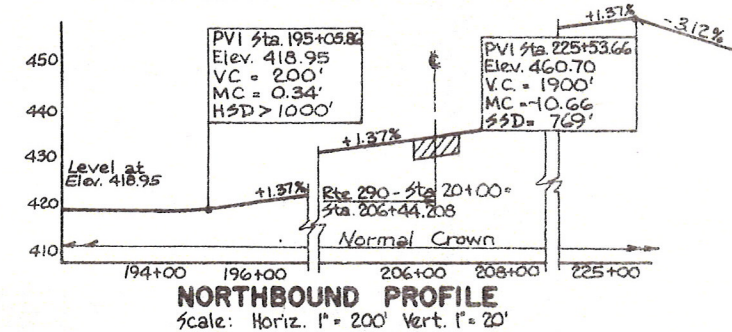
3/14/90
 3/29/90

✓ R. Engh (TC) 4/9/98
✓ R. Engh (TC) 3-27-00
✓ Boppeba 4/5/02 King
✓ Boppeba 4/12/04 3/28/94
✓ Mary Cook 05/09/06
Mary Cook 05/09/06 - Douglas R. Sellers
3/14/96

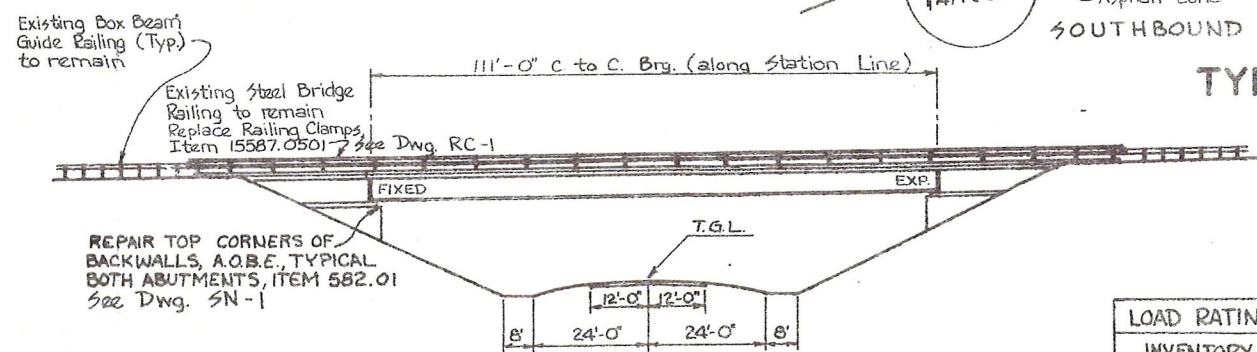
FED. ROAD REG. NO.		STATE
1	N.Y.	
INTERSTATE		
BUTTERNUT		
BUTTERNUT		
SH 70-7		

PROPOSED JOINTS

Site Reclaim
3/29/90


$$\begin{array}{r} 207+03.24 \\ -205+88.17 \\ \hline 1+15.07 \end{array}$$


TYPICAL APPROACH SECTION
Scale: 1" = 10'



ELEVATION
Scale: 1" = 20'

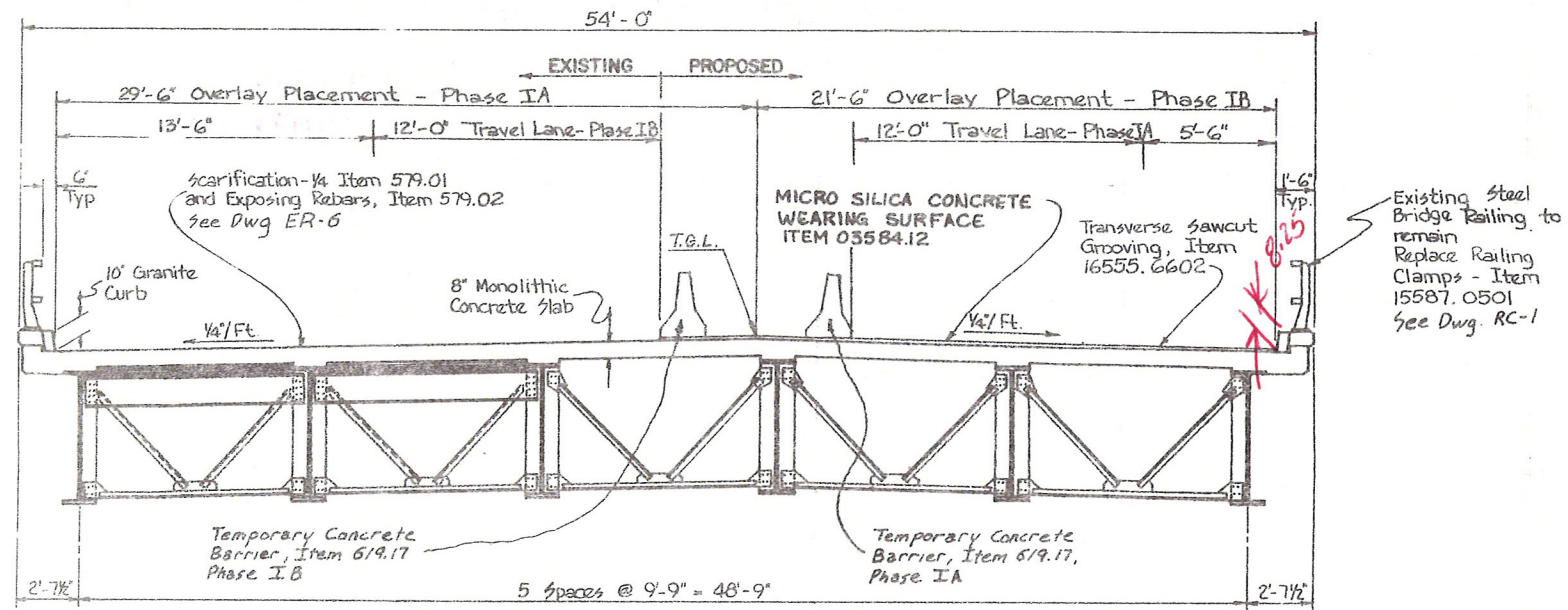
	LOAD RATING	H.S. LOADING
	INVENTORY	OPERATING
BIN 1093561	H ₂ 20.7 (37.29T) W ₂ #	H ₂ 39.4 (70.93T) W ₂ #
BIN 1093562	H ₂ 20.0 (35.91T) W ₂ #	H ₂ 38.0 (68.32T) W ₂ #

* W.S. = Working stress

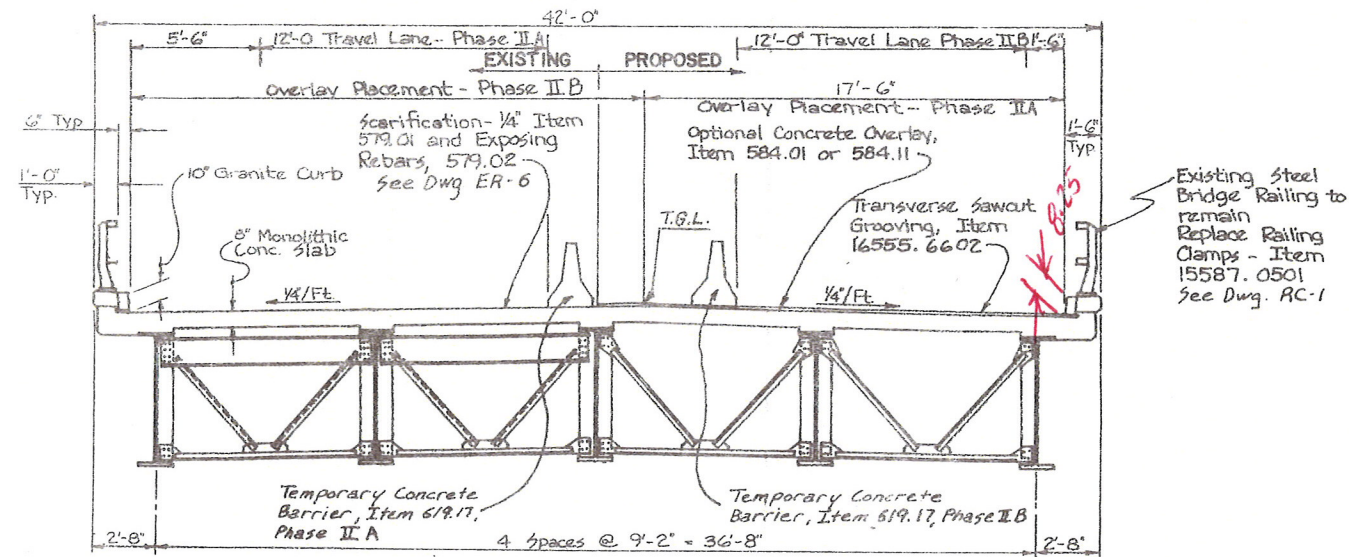
AS - BUILT REVISIONS				
SIGNATURE			DATE	
BIN 1093561 AND 1093562 I - 481 SB AND NB OVER RTE. 290				
STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION				
DRAWING No. RD 6	SCALE As shown	DATE	REGION 3	SHEET NO. 25

FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOT SHE
1	N.Y.	IR-431-(174) BH1-481-(174)	36	60

INTERSTATE ROUTE CONNECTION 570
BUTTERNUT INTERCHANGE - PHASE 2
BUTTERNUT INTERCHANGE TO COLLAMER,
SH 70-7 ONONDAGA COUNTY



TYPICAL BRIDGE SECTION
(Northbound)
Looking North
Scale: 1/4" = 1'-0"



TYPICAL BRIDGE SECTION
(Southbound)
Looking North
Scale: 1/4" = 1'-0"

AS - BUILT REVISIONS

SIGNATURE

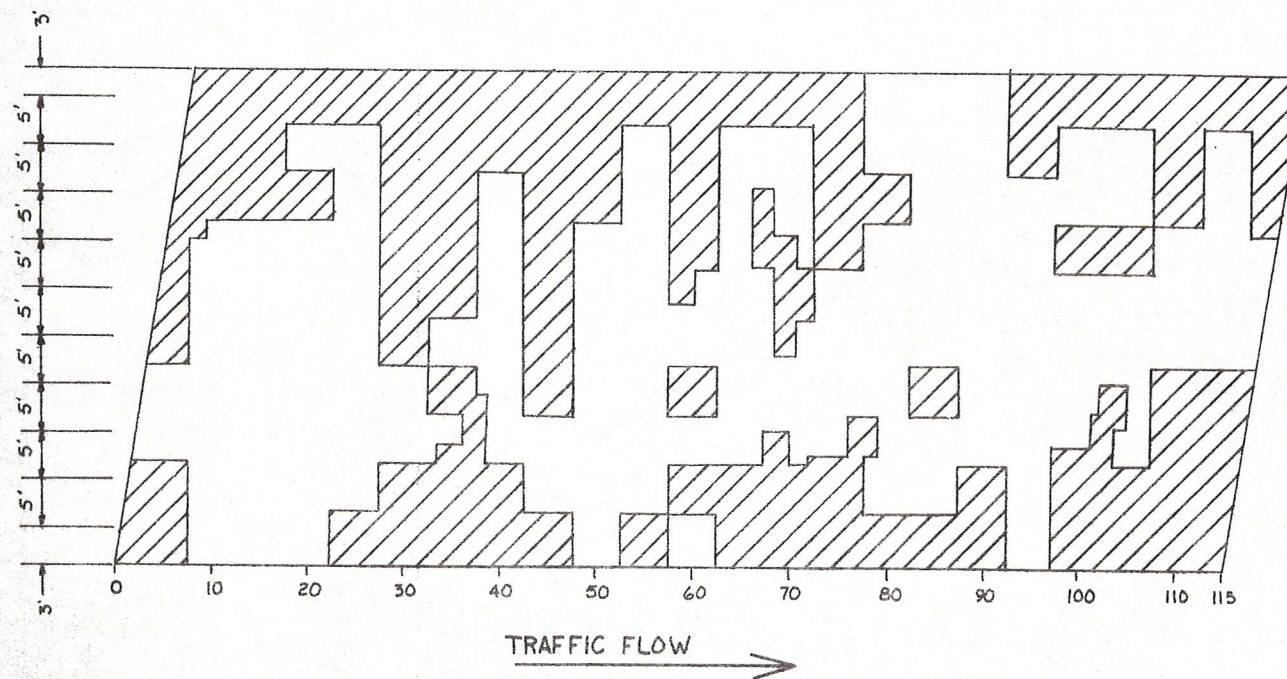
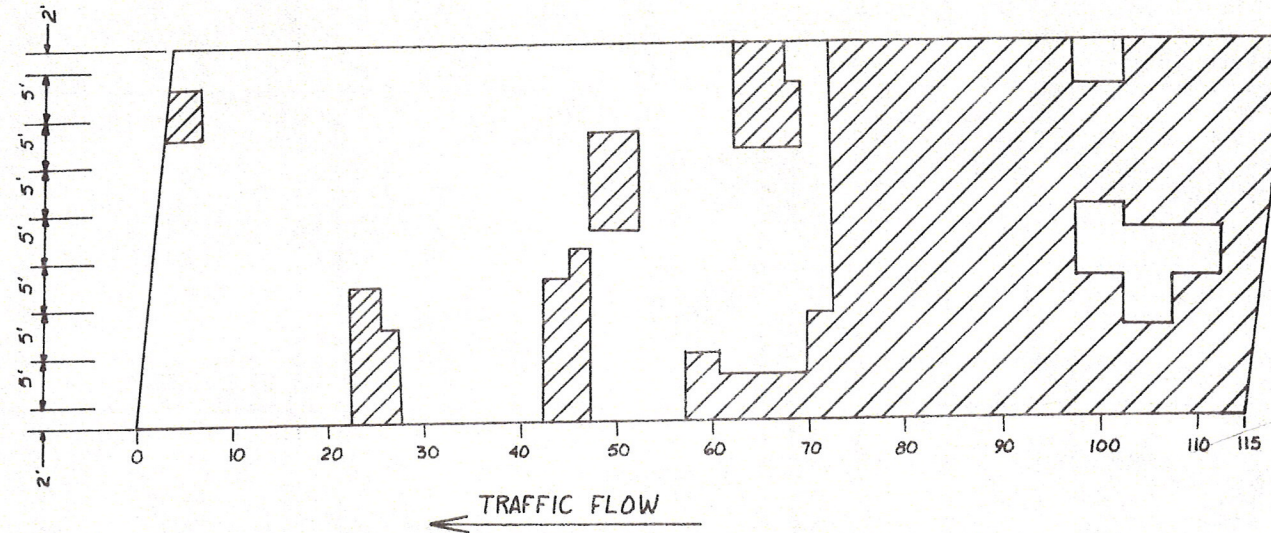
DATE

BIN 1093561 AND 1093562
I - 481 SB AND NB OVER RTE. 290

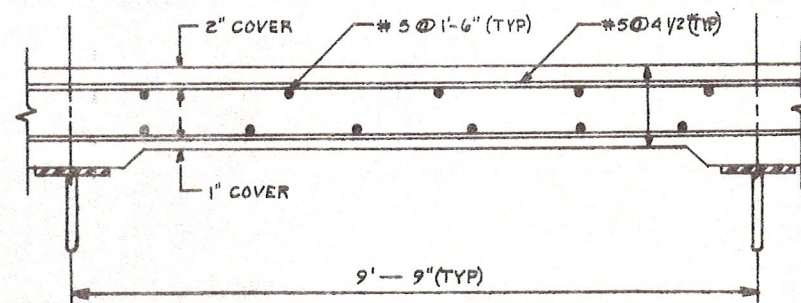
DESIGNED BY: [Name] CHECKED BY: [Name] ESTIMATED BY: [Name] CHECKED BY: [Name] DATE: 11/24/85

D251436

FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TO SHEET
1	N.Y.	109-401-0175 1011-401-0175	57	60
INTERSTATE ROUTE CONNECTION 570				
BUTTERNUT INTERCHANGE - PHASE 2				
BUTTERNUT INTERCHANGE TO COLLAMER, SH 70-7 ONONDAGA COUNTY				



Approximate Area for Exposing
Reinforcing Bars, Item 579.02



TOP BAR REINFORCEMENT
NOT TO SCALE

AS - BUILT REVISIONS

SIGNATURE

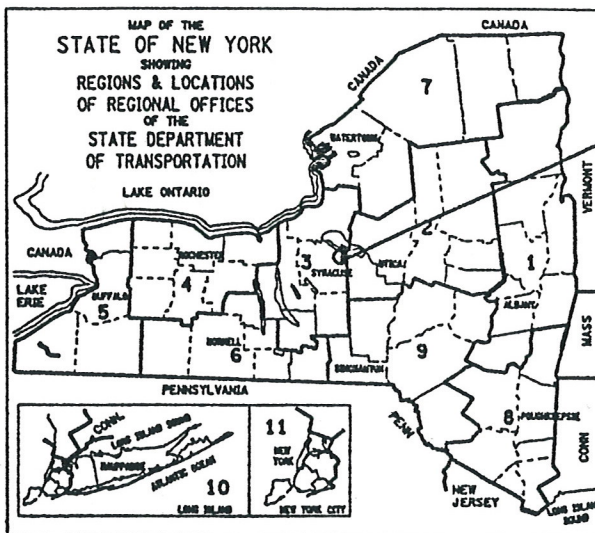
DATE

BINS 1093561 & 2

I-481 SB OVER RTE. 290, I-481 NB OVER RT

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

DRAWING No. SCALE DATE REGION 3 SHEET 57



STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION
OFFICE OF ENGINEERING

BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)
VARIOUS BRIDGES ON INTERSTATE 481
TOWNS OF DEWITT AND CICERO

VOLUME 1 OF 2

432 SHEETS

ONONDAGA

COUNTY

CONTRACT D259214

F.A. PROJECT

ALL WORK CONTEMPLATED UNDER THIS CONTRACT IS TO BE COVERED BY AND IN CONFORMITY WITH THE STANDARD SPECIFICATIONS (METRIC UNITS) OF JANUARY 2, 2002, AS AMENDED BY ADDENDA NOS. 1 AND 2, EXCEPT AS MODIFIED ON THESE PLANS AND IN THE ITEMIZED PROPOSAL.

THIS IS A BRIDGE REHABILITATION PROJECT ON VARIOUS BRIDGES ON INTERSTATE 481, LOCATED IN THE TOWNS OF CICERO AND DEWITT IN ONONDAGA COUNTY. THIS WORK CONSISTS OF BRIDGE JOINTS, BEARINGS, BRIDGE RAIL AND CONCRETE REPAIR OF SUBSTRUCTURES. THERE ARE 28 BRIDGES IN THE PROJECT BEGINNING AT REFERENCE MARKER 4811-3301-1000 SOUTH OF THE CITY OF SYRACUSE AND ENDING AT REFERENCE MARKER 4811-3301-2143. 1481 INTERCHANGE NORTH OF THE CITY.

CONTRACTOR'S NAME _____

AWARD DATE _____

COMPLETION DATE _____

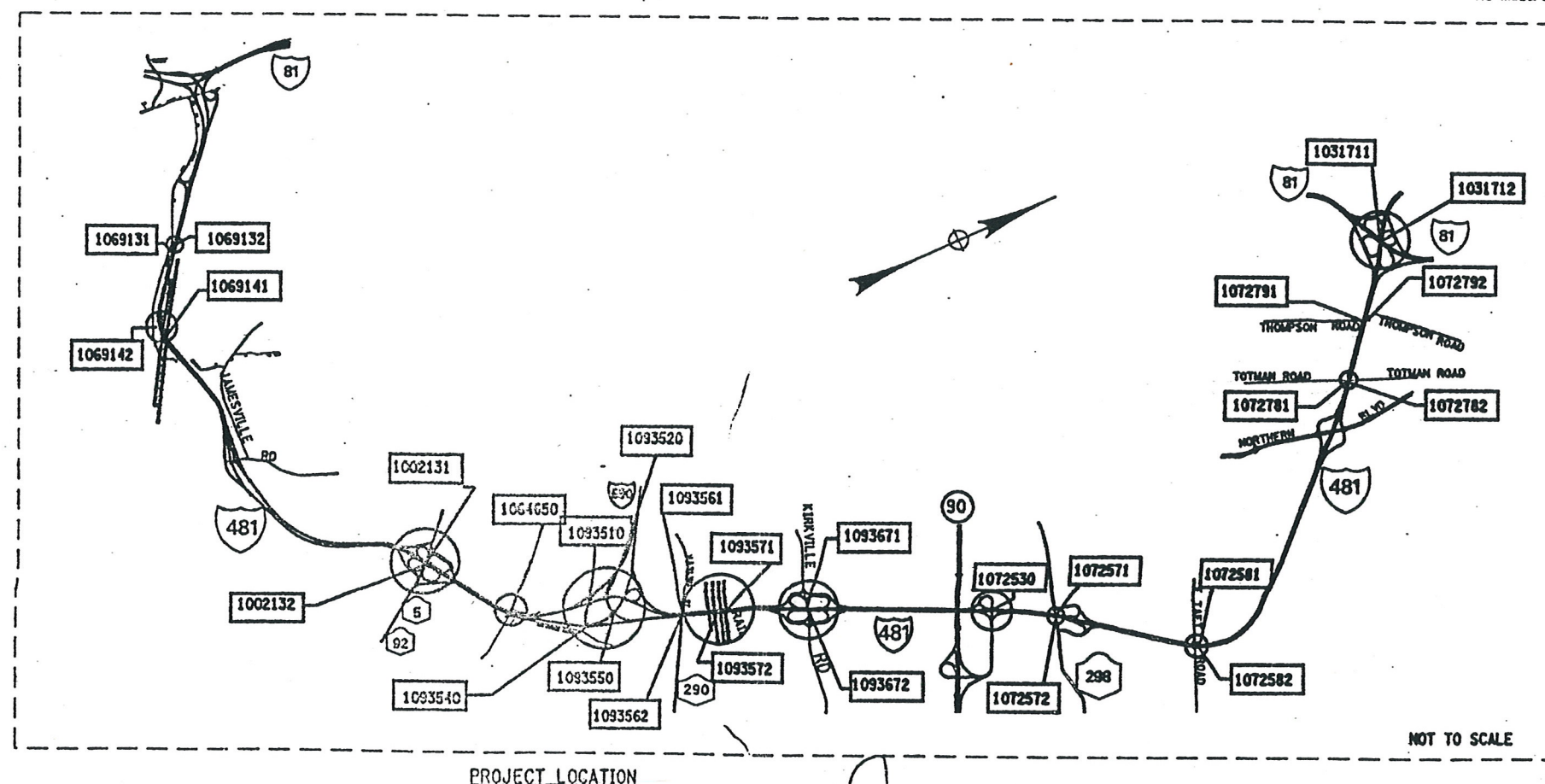
FINAL ACCEPTANCE DATE _____

REGIONAL DIRECTOR _____

ENGINEER IN CHARGE _____

FINAL COST TOTAL _____

FISCAL SHARE _____ COST(S) _____



NOT TO SCALE

PROJECT LOCATION

RECOMMENDED BY: John E. Furt
REGIONAL DESIGN ENGINEER

RECOMMENDED BY
2 Murray A. Smith
REGIONAL CONSTRUCTION ENGINEER

RECOMMENDED BY *[Signature]* 9/04/02
DATE REGIONAL TRANSPORTATION MAINTENANCE ENGINEER

RECOMMENDED BY [Signature] 9-24-02

APPROVED BY [Signature], 09.09.07

BRIDGE REHAB. PROJ.- ELEMENT SPECIFIC			
VARIOUS BRIDGES ON INTERSTATE 481			
TOWNS OF DEWITT AND CICERO			
ONONDAGA COUNTY			
FED. ROAD REG. NO.	STATE	SHEET NO.	TOTAL SHEETS
1	N.Y.	1	432
FEDERAL AID PROJECT NO.			
CAPITAL PROJECT IDENTIFICATION NO. 3056.13			
INDEX ON SHEET NO. 5 & 6			

CHECKED BY
DRAFTED BY
ESTIMATED BY
DESIGNED BY

INDEX		
SHEET NO.	DESCRIPTION	DRAWING NO.
1	TITLE SHEET	COVER
2,3,4	ESTIMATE OF QUANTITIES	
5,6	INDEX	IDX-1 - IDX-2
7-155	MAINTENANCE AND PROTECTION OF TRAFFIC	MPT-1 - MPT-149
156	CROSSOVER TYPICAL SECTION	CTS-1
157-160	CROSSOVER SURVEY CONTROL DATA	HC-1 - HC-4
161-166	CROSSOVER PLANS	CPL-1 - CPL-6
167-174	CROSSOVER PROFILES	CPR-1 - CPR-8
175-177	CROSSOVER MISC. DETAILS	CMD-1 - CMD-3
178-179	CROSSOVER MISC. TABLES	CMT-1 - CMT-2
180-191	ESTIMATE OF QUANTITIES BY STRUCTURE	QE-1A - QE-4C
192	GENERAL NOTES	GN-1
193	BIN 1002131, I481SB/RT. 5, PLAN AND ELEVATION	GP1-1
194	BIN 1002131, TYPICAL BRIDGE SECTION AND PROFILE	TS1-1
195-197	BIN 1002131, SOUTH ABUTMENT (SB)	AB1-1 - AB1-3
198-199	BIN 1002131, NORTH ABUTMENT (SB), SHEET PILING LAYOUT	AB1-4 - AB1-5
200-201	BIN 1002131, PIER 1 & PIER 2 SB REMOVAL DETAILS	PR1-1 & PR1-2
202	BIN 1002131, PEDESTAL REPLACEMENT	PR1-3
203	BIN 1002131, BOLSTER DETAILS	PR1-4
204	BIN 1002131, ANCHOR BOLT LAYOUT (SB)	PR1-5
205	BIN 1002132, I481NB/RT. 5, PLAN AND ELEVATION	GP2-1
206-207	BIN 1002132, TYPICAL BRIDGE SECTION AND PROFILE, APPROACH SECTION	TS2-1 & TS2-2
208-213	BIN 1002132, SOUTH ABUTMENT (NB)	AB2-1 - AB2-6
214-219	BIN 1002132, NORTH ABUTMENT (NB)	AB2-7 - AB2-12
220-221	BIN 1002132, PIERS (NB)	PR2-1 & PR2-2
222	BIN 1002132, PEDESTAL REPLACEMENT (NB)	PR2-3
223	BIN 1002132, BOLSTER DETAILS (NB)	PR2-4
224	BIN 1002132, ANCHOR BOLT LAYOUT (NB)	PR2-5
225	BIN 1031711 AND 1031712, I-481/I-81, PLAN AND ELEVATION	GP3-1
226	BIN 1031711 & 1031712, TYPICAL BRIDGE SECTION AND PROFILE	TS3-1
227	BIN 1031711, EAST ABUTMENT (SB) PLAN & ELEVATION	AB3-1
228	BIN 1031711, WEST ABUTMENT (SB) PLAN & ELEVATION	AB3-2
229	BIN 1031712, EAST ABUTMENT (NB) PLAN & ELEVATION	AB3-3
230	BIN 1031712, WEST ABUTMENT (NB) PLAN & ELEVATION	AB3-4
231	BIN 1031711 & 1031712, APPROACH SLABS	AS3-1
232	BIN 1064650, KINNE RD/I-481, PLAN, ELEVATION, AND BRIDGE SECTION	GP4-1
233	BIN 1069131 & 1069132, I-481/QUARRY DRIVEWAY, PLAN AND ELEVATION	GP5-1
234	BIN 1069131 & 1069132, TYPICAL BRIDGE SECTION AND PROFILE AND BRIDGE SECTION	TS5-1
235	BIN 1069131, WEST ABUTMENT (SB) PLAN & ELEVATION	AB5-1
236	BIN 1069131, EAST ABUTMENT (SB) PLAN & ELEVATION	AB5-2
237	BIN 1069132, EAST ABUTMENT (NB) PLAN & ELEVATION	AB5-3
238-239	BIN 1069141 & 1069142, I-481/NYS + W RAILROAD, GENERAL PLAN AND ELEVATION	GP6-1 - GP6-2
240-241	BIN 1069141 & 1069142, TYPICAL BRIDGE SECTION AND PROFILES	TS6-1 & TS6-2
242	BIN 1069141, WEST ABUTMENT (SB) PLAN & ELEVATION	AB6-1
243	BIN 1069141, EAST ABUTMENT (SB) PLAN & ELEVATION	AB6-2
244	BIN 1069142, WEST ABUTMENT (NB) PLAN & ELEVATION	AB6-3
245	BIN 1069142, EAST ABUTMENT (NB) PLAN & ELEVATION	AB6-4

INDEX (CONTINUED)		
SHEET NO.	DESCRIPTION	DRAWING NO.
246	BIN 1072530, RAMP TO I-481/I-481, PLAN, ELEVATION AND BRIDGE SECTION	GP7-1
247-248	BIN 1072530, EAST ABUTMENT	AB7-1 - AB7-2
249	BIN 1072571 & BIN 1072572, I-481/ROUTE 298 PLAN AND ELEVATION AND BRIDGE SECTION	GP8-1
250	BIN 1072571 & BIN 1072572, TYPICAL BRIDGE SECTION AND PROFILE	TS8-1
251	BIN 1072571, SOUTH ABUTMENT (SB) PLAN & ELEVATION	AB8-1
252	BIN 1072571, NORTH ABUTMENT (SB) PLAN & ELEVATION	AB8-2
253	BIN 1072572, SOUTH ABUTMENT (NB) PLAN & ELEVATION	AB8-3
254	BIN 1072581 & BIN 1072582, I-481/TAFT ROAD, PLAN AND ELEVATION	GP9-1
255	BIN 1072581 & 1072582, TYPICAL BRIDGE SECTION AND PROFILE	TS9-1
256-257	BIN 1072581, SOUTH ABUTMENT AND NORTH ABUTMENT (SB)	AB9-1 & AB9-2
258-259	BIN 1072582, SOUTH ABUTMENT AND NORTH ABUTMENT (NB)	AB9-3 & AB9-4
260	BIN 1072781 & BIN 1072782, I-481/TOTMAN ROAD, PLAN, ELEVATION AND BRIDGE SECTION	GP10-1
261	BIN 1072781 & BIN 1072782 TYPICAL BRIDGE SECTION AND PROFILE	TS10-1
262-263	BIN 1072781, EAST ABUTMENT (SB) PLAN & ELEVATION	AB10-1 & AB10-2
264	BIN 1072782, WEST ABUTMENT (NB) PLAN & ELEVATION	AB10-3
265	BIN 1072781, APPROACH SLABS	AS10-1
266	BIN 1072791 & BIN 1072792, I-481/ THOMPSON ROAD, PLAN, ELEVATION AND BRIDGE SECTION	GP11-1
267	BIN 1072791 & BIN 1072792 TYPICAL BRIDGE SECTIONS AND PROFILE	TS11-1
268	BIN 1072791, EAST & WEST ABUTMENTS (SB)	AB11-1
269	BIN 1072791, APPROACH SLAB (SB)	AS11-1
270	BIN 1093510, I-690 RAMP/ I-481SB, PLAN, ELEVATION, AND BRIDGE SECTION	GP12-1
271	BIN 1093510, WEST ABUTMENT PLAN & ELEVATION	AB12-1
272	BIN 1093520, WN LINE OVER INTERSTATE 481 SB, PLAN, ELEVATION, AND BRIDGE SECTION	GP13-1
273	BIN 1093520, WEST ABUTMENT PLAN & ELEVATION	AB13-1
274	BIN 1093540, I-690 EB/ I-481 NB RAMP, PLAN, ELEVATION, AND BRIDGE SECTION	GP14-1
275	BIN 1093540 TYPICAL BRIDGE SECTION AND PROFILE	TS14-1
276	BIN 1093540, WEST ABUTMENT	AB14-1
277	BIN 1093550, I-481 NB/WB CONNECTOR, PLAN, ELEVATION, AND BRIDGE SECTION	GP15-1
278	BIN 1093550, SOUTH ABUTMENT, NB PLAN & ELEVATION	AB15-1
279	BIN 1093550, NORTH ABUTMENT, NB PLAN & ELEVATION	AB15-2
280	BIN 1093561 & 1093562, I-481/ROUTE 290, PLAN, ELEVATION AND BRIDGE SECTION	GP16-1
281	BIN 1093561 & 1093562 TYPICAL BRIDGE SECTION AND PROFILE	TS16-1
282	BIN 1093561, SOUTH ABUTMENT (SB) PLAN & ELEVATION	AB16-1
283	BIN 1093562, SOUTH ABUTMENT (NB) PLAN & ELEVATION	AB16-2
284-287	BIN 1093571 & BIN 1093572, I-481/CSX RAILROAD YARD, PLAN & ELEVATION	GP17-1 - GP17-4
288	BIN 1093571 AND BIN 1093572, TYPICAL BRIDGE SECTION AND PROFILES	TS17-1
289-293	BIN 1093571 AND BIN 1093672, DRAINAGE DETAILS	DD17-1 - DD17-5
294-296	BIN 1093571 AND BIN 1093672, SCUPPER EXTENSIONS	DD17-6 - DD17-8
297-314	BIN 1093571, PIERS 1-14, (SB)	PR17-1S - PR17-1BS
315	BIN 1093572, SOUTH ABUTMENT (NB)	AB17-1
316-329	BIN 1093572, PIERS 1-14 (NB)	PR17-1N - PR17-14N
330-331	BIN 1093571 AND 1093572, PARAPET REPAIR DETAILS	PW17-1 & PW17-2
332	BIN 1093572, BRIDGE DECK REPAIRS	DR17-1

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259214	5	432
BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)				
VARIOUS BRIDGES ON INTERSTATE 481				
TOWNS OF DEWITT AND CICERO				
ONONDAGA COUNTY				
P.I.N. 305613		B.I.N. ALL BINS		

ALL DIMENSIONS ARE IN m UNLESS OTHERWISE NOTED
AS BUILT REVISIONS

SIGNATURE DATE

INTERSTATE 481
REHABILITATION PROJECT

INDEX



STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME	REGION	DATE	DRAWING NO.
305613AAL2A	3	10/02	IDX-1

CHECKED BY: UNAP'ED BY: ESTIMATED BY: CREAMED BY:

INDEX (CONTINUED)		
SHEET NO.	DESCRIPTION	DRAWING NO.
333	BIN 1093671 & 1093672, I-481/KIRKVILLE ROAD, PLAN, ELEVATION AND BRIDGE SECTION	GP18-1
334	BIN 1093671 & BIN 1093672 TYPICAL BRIDGE SECTION AND PROFILE	TS18-1
335-336	BIN 1093671, SOUTH ABUTMENT (SB) PLAN, ELEVATION AND SECTIONS	AB18-1 - AB18-2
337	BIN 1093671, NORTH ABUTMENT (NB) PLAN & ELEVATION	AB18-3
338-339	BIN 1093672, SOUTH ABUTMENT (NB) PLAN, ELEVATION AND SECTIONS	AB18-4 - AB18-5
340	BIN 1093672, NORTH ABUTMENT (NB) PLAN & ELEVATION	AB18-6
341-342	BIN 1002131, BIN 1002132 & BIN 1093571, MULTIROTATIONAL BEARINGS	BR-1 & BR-2
343	BIN 1002131, BEARING RESTORATION DETAILS	BR-3
344	BINS 1069131 & 1069132, BEARING RESTORATION DETAILS	BR-4
345-346	BIN 1069141 & BIN 1069142, BEARING RESTORATION DETAIL	BR-5 & BR-6
347	BIN 1072530, BEARING RESTORATION DETAILS	BR-7
348	BIN 1072791 AND BIN 1072792 BEARING RESTORATION DETAILS	BR-8
349	BIN 1093550, BEARING RESTORATION DETAILS	BR-9
350-351	BINS 1093751 & 1093572, BEARING RESTORATION DETAILS	BR-10 & BR-11
352	BIN 1072781 BEARING RESTORATION DETAILS	BR-12
	RAILING DETAILS	
353-355	BIN 1002131 & BIN 1002132, RAILING DETAILS	RD-1 - RD-3
356-358	BIN 1069141 & BIN 1069142, RAILING DETAILS	RD-4 - RD-6
359-360	RAILING DETAILS	RD-7 - RD-8
	BRIDGE JOINTS	
361-364	BRIDGE JOINT TABLE	JT-1 - JT-4
365	COMPRESSION SEAL JOINT DETAIL (ALL BRIDGES)	JD-1
366-370	BIN 1002131, JOINT DETAILS	JD-2 - JD-6
371-375	BIN 1002132, JOINT DETAILS	JD-7 - JD-11
376-377	BIN 1031711 & BIN 1031712, JOINT DETAILS	JD-12 - JD-13
378-383	BIN 1064650, JOINT DETAILS	JD-14 - JD-19
384-385	BIN 1069131, JOINT DETAILS	JD-20 + JD-21
386-387	BIN 1069132, JOINT DETAILS	JD-22 + JD-23
388-392	BIN 1069141 & BIN 1069142	JD-24 - JD-28
393-394	BIN 1072530, JOINT DETAILS	JD-29 + JD-30
395-396	BIN 1072571, JOINT DETAILS	JD-31 + JD-32
397-398	BIN 1072572, JOINT DETAILS	JD-33 + JD-34
399-400	BIN 1072581, JOINT DETAILS	JD-35 + JD-36
401-402	BIN 1072582, JOINT DETAILS	JD-37 + JD-38
403-404	BIN 1072781, JOINT DETAILS	JD-39 + JD-40
405-406	BIN 1072782, JOINT DETAILS	JD-41 + JD-42
407-408	BIN 1072792, JOINT DETAILS	JD-43 + JD-44
409-410	BIN 1093510, JOINT DETAILS	JD-45 + JD-46
411	BIN 1072791, BIN 1093520 & BIN 1093540, JOINT DETAILS	JD-47
412-413	BIN 1093550, JOINT DETAILS	JD-48 + JD-49
414-416	BIN 1093561 & BIN 1093562, JOINT DETAILS	JD-50 - JD-52
417-420	BIN 1093571 & BIN 1093572, JOINT DETAILS	JD-53 - JD-56
421-423	BIN 1093671 & BIN 1093672, JOINT DETAILS	JF-57 - JD-59

INDEX (CONTINUED)		
SHEET NO.	DESCRIPTION	DRAWING NO.
424	VARIOUS BRIDGES - ROAD PLATE DETAIL	AA - RP1
	BAR LIST	
425-428	ALL BINS (BRIDGE JOINT SYSTEMS)	BL-1 - BL-4
429	BIN 1002131 & 1002132	BL-5
430	BIN 1093571	BL-6
431	STRUCTURAL SLAB OVERLAY & ASPHALT PAVEMENT REPAIR DETAILS	MS-1
432	MISC. TABLE	MT-1

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259214	6	432
BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)				
VARIOUS BRIDGE ON INTERSTATE 481				
TOWN OF DEWITT AND CICERO				
ONONDAGA COUNTY				
P.I.N. 305613		B.I.N. VARIOUS		

ALL DIMENSIONS ARE IN m UNLESS OTHERWISE NOTED
AS BUILT REVISIONS

SIGNATURE	DATE		
INTERSTATE 481 REHABILITATION PROJECT			
INDEX			
STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION			
FILENAME 305613AAL2A	REGION 3	DATE 10/02	DRAWING NO. 10X-2

CHECKED BY

DRAFTED BY

ESTIMATED BY

CHECKED BY

DESIGNED BY

JOB MANAGER

DESIGN SUPERVISOR

ESTIMATE OF QUANTITIES BY STRUCTURE

ITEM #	DESCRIPTION	UNIT	1093550		1093561		1093562		1093571		1093572		1093671		1093672	
			EST.	FINAL	EST.	FINAL	EST.	FINAL	EST.	FINAL	EST.	FINAL	EST.	FINAL	EST.	FINAL
203.02 M	UNCLASSIFIED EXCAVATION & DISPOSAL	CM	---	---	---	---	---	---	---	---	---	---	---	---	---	---
203.03 M	EMBANKMENT IN PLACE	CM	---	---	---	---	---	---	---	---	7	---	---	---	---	---
203.07 M	SELECT GRANULAR FILL	CM	---	---	---	---	---	---	4	---	10	---	---	---	---	---
203.1770 M	CLEAN EXISTING PIPE CULVERT	M	---	---	---	---	---	---	4	---	4	---	---	---	---	---
203.18 M	CLEANING CLOSED DRAINAGE SYSTEMS	M	34	---	---	---	---	---	256	---	269	---	---	---	---	---
203.19 M	CLEAN DRAINAGE STRUCTURES AND MANHOLES	EA	---	---	---	---	---	---	4	---	6	---	---	---	---	---
203.21 M	SELECT STRUCTURE FILL	CM	---	---	---	---	---	---	---	---	---	---	---	---	---	---
15203.51 M	GRADING, CLEANING AND RESHAPING EXISTING DITCHES	M	---	---	---	---	---	---	70	---	77	---	---	---	---	---
206.01 M	STRUCTURE EXCAVATION	CM	---	---	---	---	---	---	---	---	---	---	---	---	---	---
206.02 M	TRENCH AND CULVERT EXCAVATION	CM	---	---	---	---	---	---	24	---	22	---	---	---	---	---
207.10 M	GEOTEXTILE BEDDING	SM	---	---	---	---	---	---	32	---	32	---	---	---	---	---
210.5433 M	REMOVAL AND DISPOSAL OF ASBESTOS CONTAINING CAULKING (BY 12)	LS	---	---	---	---	---	---	NEC	---	NEC	---	---	---	---	---
210.9913 M	REMOVAL AND DISPOSAL OF MISC. ASBESTOS CONTAINING MATERIAL BY-12	LS	NEC	---	---	---	---	---	---	---	---	---	---	---	---	---
304.15 M	SUBBASE COURSE, OPTIONAL TYPE	CM	---	---	---	---	---	---	---	---	2	---	---	---	---	---
402.128201 M	12.5mm F2 SUPERPAVE HMA, 80 SERIES COMPACTION	MT	6	---	4	---	5	---	3	---	3	---	5	---	5	---
402.128211 M	PLANT PRODUCTION QUALITY ADJUSTMENT TO ITEM 402.128201M	QU	1	---	1	---	1	---	1	---	1	---	1	---	1	---
402.258901 M	25mm F9 SUPERPAVE HMA, 80 SERIES COMPACTION	MT	10	---	6	---	8	---	5	---	5	---	8	---	8	---
402.258911 M	PLANT PRODUCTION QUALITY ADJUSTMENT TO 402.258901M	QU	1	---	1	---	1	---	1	---	1	---	1	---	1	---
402.378901 M	37.5mm, F9 SUPERPAVE HMA, 80 SERIES COMPACTION	MT	---	---	---	---	---	---	---	---	---	---	---	---	---	---
402.378911 M	PLANT PRODUCTION QUALITY ADJUSTMENT TO 402.378901M	QU	---	---	---	---	---	---	---	---	---	---	---	---	---	---
407.01 M	TACK COAT	L	22	---	13	---	17	---	12	---	12	---	17	---	17	---
490.30 M	MISC. COLD MILLING OF BITUMINUS CONCRETE	SM	61	---	37	---	48	---	31	---	31	---	48	---	48	---
502.92 M	SEALING TRANSVERSE JOINTS	M	---	---	---	---	---	---	---	---	---	---	---	---	---	---
08520.5014 M	SAWCUT, ASPH, CONC/ASPH, OVERLAY- PCC PAVE	M	41	---	25	---	32	---	21	---	21	---	32	---	32	---
552.13 M	TEMPORARY STEEL SHEETING	SM	---	---	---	---	---	---	---	---	---	---	---	---	---	---
555.0105 M	CONCRETE FOR STRUCTURES - CLASS A	CM	---	---	---	---	---	---	1	---	2	---	---	---	---	---
555.09 M	CONCRETE FOR STRUCTURES, CLASS HP	CM	2	---	2	---	2	---	88	---	15	---	2	---	2	---
18555.81 M	STRUCTURAL CRACK SEALING	LM	---	---	---	---	---	---	---	---	---	---	---	---	---	---
556.0201 M	UNCOATED BAR REINFORCEMENT FOR CONCRETE STRUCTURES	KG	---	---	---	---	---	---	1975	---	---	---	---	---	---	---
556.0202 M	EPOXY COATED REBAR FOR STRUCTURES	KG	137	---	109	---	140	---	2732	---	613	---	145	---	145	---
558.01 M	TRANSVERSE SAWCUT GROOVING OF STR SLAB SURF	SM	---	---	---	---	12	---	---	---	77	---	---	---	---	---
18559.1696 M	PROTECTIVE SEALER STRUCTURAL CONCRETE	SM	---	---	---	---	---	---	1027	---	1031	---	---	---	---	---
18559.1896 M	PROT SEAL STR. CONC. - NEW BRIDGE DECK OVERLAYS	SM	---	---	---	---	12	---	---	---	77	---	---	---	---	---
564.0501 M	STRUCTURAL STEEL	LS	---	---	---	---	---	---	---	---	---	---	---	---	---	---
565.1522 M	TYPE M.R. EXPANSION BEARING (1001 TO 2000 KN)	EA	---	---	---	---	---	---	8	---	---	---	---	---	---	---
565.1722 M	TYPE M.R. FIXED BEARING (1001 TO 2000 KN)	EA	---	---	---	---	---	---	8	---	---	---	---	---	---	---
15565.4302 M	BRIDGE BEARING RESTORATION	EA	12	---	---	---	---	---	32	---	36	---	---	---	---	---
566.01 M	MODULAR EXPANSION JOINT SYSTEM, ONE-CELL	M	---	---	---	---	---	---	104	---	115	---	---	---	---	---
566.02 M	MODULAR EXPANSION JOINT SYSTEM TWO-CELL	M	---	---	---	---	---	---	---	---	---	---	---	---	---	---
567.31 M	ARM JNT SYS WI COMPRESSION SEAL - TY A1	M	---	---	---	---	---	---	---	---	---	---	---	---	---	---
567.32 M	ARM JNT SYS WI COMPRESSION SEAL - TY A2	M	---	---	---	---	---	---	---	---	---	---	---	---	---	---
567.35 M	ARM JNT SYS WI COMPRESSION SEAL - TY A5	M	---	---	13	---	17	---	---	---	---	---	17	---	17	---
567.36 M	ARM JNT SYS WI COMPRESSION SEAL - TY A6	M	---	---	---	---	---	---	---	---	---	---	---	---	---	---
18567.46 M	ELASTOMERIC CONCRETE FOR BRIDGE JOINT SYSTEMS	M	---	---	---	---	---	---	31	---	21	---	---	---	---	---
16567.640001 M	REPLACE COMPRESSION SEAL IN EXISTING BRIDGE JOINTS	M	---	---	---	---	---	---	---	---	---	---	---	---	---	---
568.32 M	CEMENT MORTAR PADS	EA	---	---	---	---	---	---	---	---	---	---	---	---	---	---
568.50 M	STEEL BRIDGE RAILING (2 RAIL)	M	---	---	---	---	---	---	---	---	---	---	---	---	---	---
570.090001 M	ENVIRONMENTAL GROUND PROTECTION	LS	---	---	---	---	---	---	NEC	---	---	---	---	---	---	---
570.090002 M	ENVIRONMENTAL GROUND PROTECTION	LS	---	---	---	---	---	---	---	---	NEC	---	---	---	---	---
570.090003 M	ENVIRONMENTAL GROUND PROTECTION	LS	---	---	---	---	---	---	---	---	---	---	---	---	---	---

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259214	189	432
BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)				
VARIOUS BRIDGES ON INTERSTATE 481				
TOWNS OF DEWITT AND CICERO				
ONONDAGA COUNTY				
P.I.N. 305613		B.I.N. VARIOUS		

ALL DIMENSIONS ARE IN m UNLESS OTHERWISE NOTED
AS BUILT REVISIONS

SIGNATURE DATE

SHEET 10 OF 12
ESTIMATE OF QUANTITIES



STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME 305613.L1A	REGION 3	DATE 10/02	DRAWING NO. QE-4A
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FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259214	190	432
BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)				
VARIOUS BRIDGES ON INTERSTATE 481				
TOWNS OF DEWITT AND CICERO				
ONONDAGA COUNTY				
P.I.N. 305613			B.I.N. VARIOUS	

ITEM #	DESCRIPTION	UNIT	1093550		1093561		1093562		1093571		1093572		1093671		1093672	
			EST.	FINAL	EST.	FINAL	EST.	FINAL	EST.	FINAL	EST.	FINAL	EST.	FINAL	EST.	FINAL
570.090004 M	ENVIRONMENTAL GROUND PROTECTION	LS	---	---	---	---	---	---	---	---	---	---	---	---	---	---
570.100001 M	ENVIRONMENTAL WATERWAY PROTECTION	LS	---	---	---	---	---	---	NEC	---	---	---	---	---	---	---
570.100002 M	ENVIRONMENTAL WATERWAY PROTECTION	LS	---	---	---	---	---	---	---	---	NEC	---	---	---	---	---
16570.32 M	LOCALIZED PAINTING OF BARE STRUCTURAL STEEL	SM	---	---	---	---	---	---	18	---	21	---	---	---	---	---
16570.72 M	LOCALIZED VACUUM CONTAINED CLEANING OF STRUCTURAL STEEL PLANAR SURFACES	SM	---	---	---	---	---	---	18	---	21	---	---	---	---	---
16570.76 M	LOCALIZED VACUUM CONTAINED CLEANING OF STRUCTURAL STEEL - IRREGUALR	SM	---	---	---	---	---	---	---	---	---	---	---	---	---	---
571.010001 M	TREATMENT AND DISPOSAL OF PAINT REMOVAL WASTE	CM	---	---	---	---	---	---	1	---	---	---	---	---	---	---
571.010002 M	TREATMENT AND DISPOSAL OF PAINT REMOVAL WASTE	CM	---	---	---	---	---	---	---	---	1	---	---	---	---	---
571.010003 M	TREATMENT AND DISPOSAL OF PAINT REMOVAL WASTE	CM	---	---	---	---	---	---	---	---	---	---	---	---	---	---
571.010004 M	TREATMENT AND DISPOSAL OF PAINT REMOVAL WASTE	CM	---	---	---	---	---	---	---	---	---	---	---	---	---	---
572.010001 M	STRUCTURAL STEEL PAINT SYSTEM; SHOP APPLIED	SM	---	---	---	---	---	---	1	---	---	---	---	---	---	---
572.010002 M	STRUCTURAL STEEL PAINT SYSTEM; SHOP APPLIED	SM	---	---	---	---	---	---	---	---	1	---	---	---	---	---
576.2001M	DOWNSPOUT SYSTEM, DUCTILE IRON	M	---	---	---	---	---	---	3	---	4	---	---	---	---	---
578.020001 M	OVERLAY CONCRETE - CLASS E	SM	---	---	---	---	---	---	---	---	---	---	---	---	---	---
578.020002 M	OVERLAY CONCRETE - CLASS E	SM	---	---	---	---	---	---	---	---	---	---	---	---	---	---
578.020003 M	OVERLAY CONCRETE - CLASS E	SM	---	---	---	---	---	---	---	---	---	---	---	---	---	---
578.020004 M	OVERLAY CONCRETE - CLASS E	SM	---	---	---	---	---	---	---	---	77	---	---	---	---	---
578.020005 M	OVERLAY CONCRETE - CLASS E	SM	---	---	---	---	12	---	---	---	---	---	---	---	---	---
578.030001 M	SLAB RECONSTRUCTION CONCRETE - CLASS D OR E	SM	---	---	---	---	---	---	---	---	---	---	---	---	---	---
578.030002 M	SLAB RECONSTRUCTION CONCRETE - CLASS D OR E	SM	---	---	---	---	---	---	---	---	---	---	---	---	---	---
578.030003 M	SLAB RECONSTRUCTION CONCRETE - CLASS D OR E	SM	---	---	---	---	---	---	---	---	---	---	---	---	---	---
578.030004 M	SLAB RECONSTRUCTION CONCRETE - CLASS D OR E	SM	---	---	---	---	---	---	---	---	77	---	---	---	---	---
578.030005 M	SLAB RECONSTRUCTION CONCRETE - CLASS D OR E	SM	---	---	---	---	12	---	---	---	---	---	---	---	---	---
578.030006 M	SLAB RECONSTRUCTION CONCRETE - CLASS D OR E	SM	---	---	---	---	---	---	---	---	---	---	---	---	---	---
578.030007 M	SLAB RECONSTRUCTION CONCRETE - CLASS D OR E	SM	---	---	---	---	---	---	---	---	---	---	---	---	---	---
579.02 M	REINFORCING BAR EXPOSURE	SM	---	---	---	---	12	---	---	---	77	---	---	---	---	---
580.01 M	REMOVAL OF STRUCTURAL CONCRETE	CM	2	2	2	2	2	62	15	2	2	2	2	2	2	2
582.05 M	REMOVE STRUCTURAL CONCRETE WITH CLASS A CONCRETE	CM	16	1	1	1	1	43	46	2	5	2	5	2	5	2
582.07 M	REMOVE STRUCTURAL CONCRETE AND REPLACE WITH VERTICAL OVERHEAD PATCH MATERIAL	SM	---	---	---	---	---	151	221	---	---	---	---	---	---	---
16584.13 M	RAPID SETTING CONCRETE FOR BRIDGE AND APPROACH SLAB REPAIRS	KG	---	---	---	---	---	---	---	---	---	---	---	---	---	---
585.01 M	STRUCTURAL LIFTING OPERATIONS - TYPE A	EA	12	---	---	---	---	---	---	---	---	---	---	---	---	---
585.02 M	STRUCTURAL LIFTING OPERATIONS - TYPE B	EA	---	---	---	---	---	21	25	---	---	---	---	---	---	---
585.03 M	STRUCTURAL LIFTING OPERATIONS TYPE C	EA	---	---	---	---	---	35	35	---	---	---	---	---	---	---
586.01 M	DRILL AND GROUT BOLTS, OR REINFORCING BARS	mm	19200	13050	16650	16	16	53700	59100	15600	15600	15600	15600	15600	15600	15600
17586.18M	DRILLING HOLES IN EXISITING SUBSTRUCTURE	M	---	---	---	---	---	---	---	---	---	---	---	---	---	---
16586.200125 M	DRILL AND GROUT ANCHOR BOLTS AND REBAR IN CONCRETE	EA	---	---	---	---	---	---	---	---	---	---	---	---	---	---
16586.200216 M	DRILL AND GROUT ANCHOR BOLTS AND REBAR IN CONCRETE	EA	---	---	---	---	---	---	---	---	---	---	---	---	---	---
587.01 M	BRIDGE RAILING REMOVAL AND DISPOSAL	M	---	---	---	---	---	---	---	---	---	---	---	---	---	---
589.520001 M	REMOVAL OF EXISTING STEEL	EA	---	---	---	---	---	4	---	---	---	---	---	---	---	---
589.520002 M	REMOVAL OF EXISTING STEEL	EA	---	---	---	---	---	---	6	---	---	---	---	---	---	---
589.520003 M	REMOVAL OF EXISTING STEEL	EA	---	---	---	---	---	---	---	---	---	---	---	---	---	---
589.520004 M	REMOVAL OF EXISTING STEEL	EA	---	---	---	---	---	---	---	---	---	---	---	---	---	---
589.520005 M	REMOVAL OF EXISTING STEEL	EA	---	---	---	---	---	8	---	---	---	---	---	---	---	---
590.01M	VERTICAL ADJUSTMENT OF BRIDGE DRAINAGE DEVICES	EA	---	---	---	---	---	7	9	---	---	---	---	---	---	---
603.6001 M	REINFORCED CONCRETE PIPE CLASS III, 300 mm	M	---	---	---	---	---	---	4	---	---	---	---	---	---	---
603.7301M	REINFORCED CONCRETE PIPE END SECTION 300 mm DIAMETER	EA	---	---	---	---	---	---	3	---	---	---	---	---	---	---

ALL DIMENSIONS ARE IN ^m UNLESS OTHERWISE NOTED
AS BUILT REVISIONS

SIGNATURE _____ DATE _____

SHEET 11 OF 12

ESTIMATE OF QUANTITIES

[illegible]

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME	REGION	DATE	DRAWING NO.
30561311A	3	10/02	QE-4B

CHECKED BY :

DRAFTED BY

ESTIMATED BY —

• CHECKED BY

3

ESTIMATE OF QUANTITIES BY STRUCTURE

[illegible]

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259214	191	432
BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)				
VARIOUS BRIDGES ON INTERSTATE 481				
TOWNS OF DEWITT AND CICERO				
ONONDAGA COUNTY				
P.I.N. 305613			B.I.N. VARIOUS	

STANDARD SYMBOL (PLANS)	ITEM PAYMENT UNIT: ESTIMATE OF QUANTITIES SHEET	EQUIVALENT NOMENCLATURE: SPEC BOOK/PROPOSAL
m	M	METER
m ²	SQM	SQUARE METER
m ³	CU	CUBIC METER
km	KM	KILOMETER
ha	HA	HECTARE
kg	KG	KILOGRAM
t OR Mgo	MT	METRIC TON
L	L	LITER

• THE METRIC TON IS EQUIVALENT TO ONE MEGAGRAM (Mg)

ALL DIMENSIONS ARE IN IN UNLESS OTHERWISE NOTED
AS BUILT REVISIONS

SIGNATURE _____ DATE _____

SHEET 12 OF 12

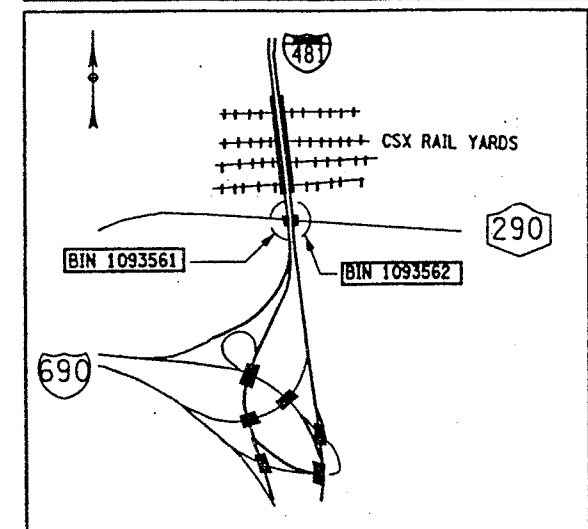
ESTIMATE OF QUANTITIES

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME	REGION	DATE	DRAWING NO.
30561311A	3	10/02	QE-4C

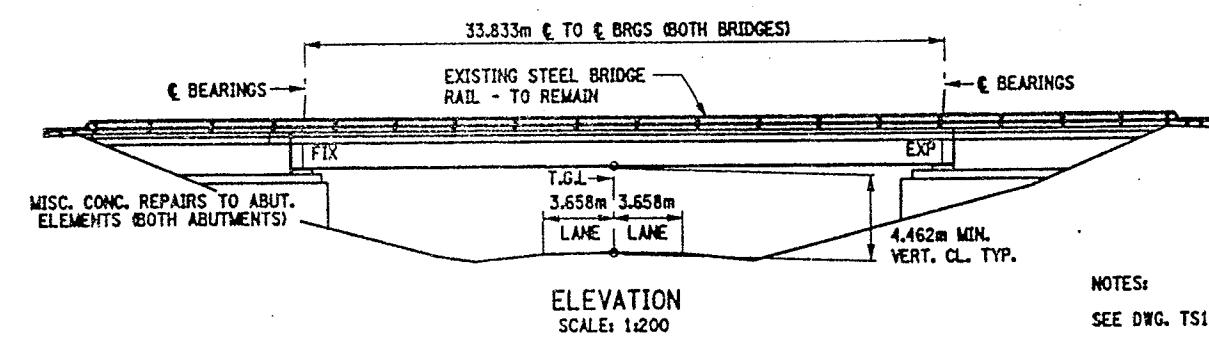
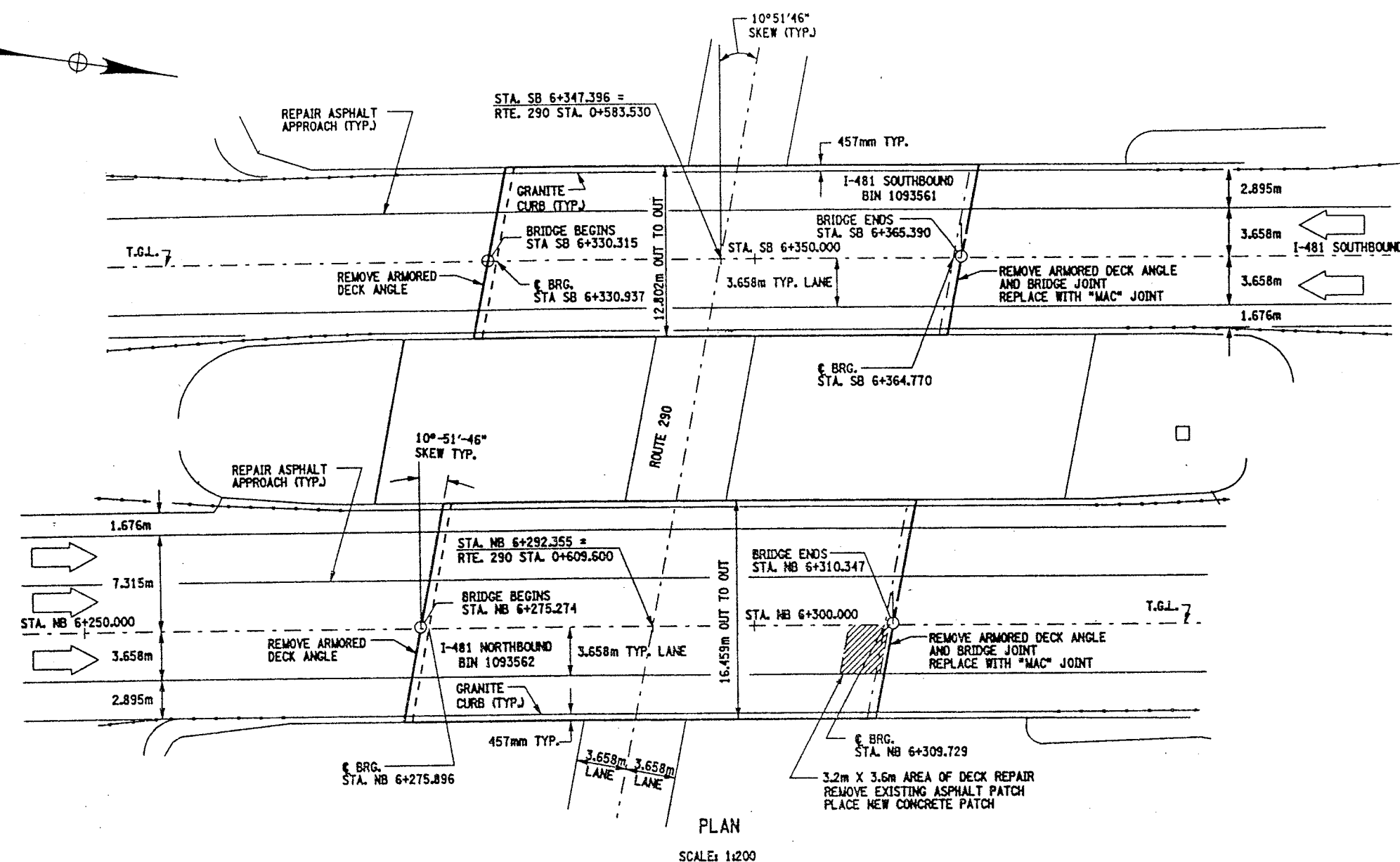
FED. ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259214	280	432

BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)	
VARIOUS BRIDGES ON INTERSTATE 481	
TOWNS OF DEWITT AND CICERO	
ONONDAGA COUNTY	
P.I.N. 305613	B.I.N. 1093561 & 1093562



LOCATION MAP
NOT TO SCALE

- WORK TO BE DONE ON BIN 1093561 (NOT NECESSARILY IN THIS ORDER)
1. ESTABLISH MP&T SCHEME FOR STAGE CONSTRUCTION.
 2. REMOVE EXISTING BRIDGE JOINT, END ABUTMENT (NORTH), TO INCLUDE REMOVAL OF THE ARMORING DECK ANGLE.
 3. REMOVE EXISTING ARMORING DECK ANGLE AT BEGINNING ABUTMENT, (SOUTH).
 4. INSTALL PROPOSED BRIDGE JOINT AT END ABUTMENT, ("MAC" JOINT).
 5. REPAIR DECK AREA AT BEGINNING ABUTMENT WHERE THE ARMORING DECK ANGLE WAS REMOVED.
 6. PERFORM MINOR REPAIRS TO ASPHALT APPROACHES.
 7. PERFORM MISCELLANEOUS REPAIRS TO CONCRETE ELEMENTS AT BOTH ABUTMENTS.



NOTES:
SEE DWG. TS16-1 FOR WORK TO BE DONE ON BIN 1093562.
"MAC" JOINT IS A MODIFIED ARMORED JOINT SYSTEM WITH COMPRESSION SEAL.
UTILITIES BELONGING TO "NEWCHANNEL CORP." AND ELECTRIC UTILITIES IN VICINITY OF THESE STRUCTURES. SEE INFORMATION AVAILABLE TO BIDDERS FOR ADDITIONAL DETAILS.

BIN 1093561 SOUTHBOUND
BIN 1093562 NORTHBOUND

ALL DIMENSIONS ARE IN m UNLESS OTHERWISE NOTED
AS BUILT REVISIONS

SIGNATURE	DATE
INTERSTATE 481 OVER ROUTE 290	
PLAN, ELEVATION AND BRIDGE SECTION	
STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION	
FILENAME 305613AG.G1A	REGION 3
DATE 10/02	DRAWING NO. GP16-1

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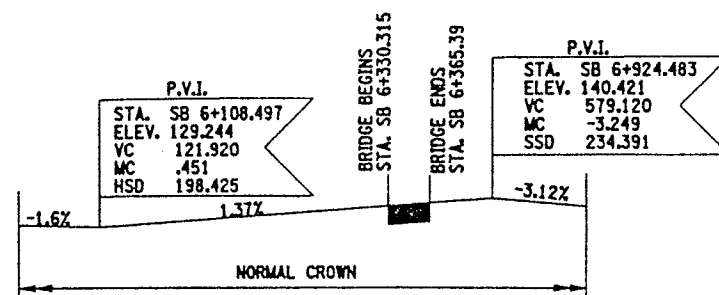
FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259214	281	432
BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)				
VARIOUS BRIDGES ON INTERSTATE 481				
TOWNS OF DEWITT AND CICERO				
ONONDAGA COUNTY				
P.I.N. 305613		B.I.N. 1093561 & 1093562		

GENERAL NOTES:

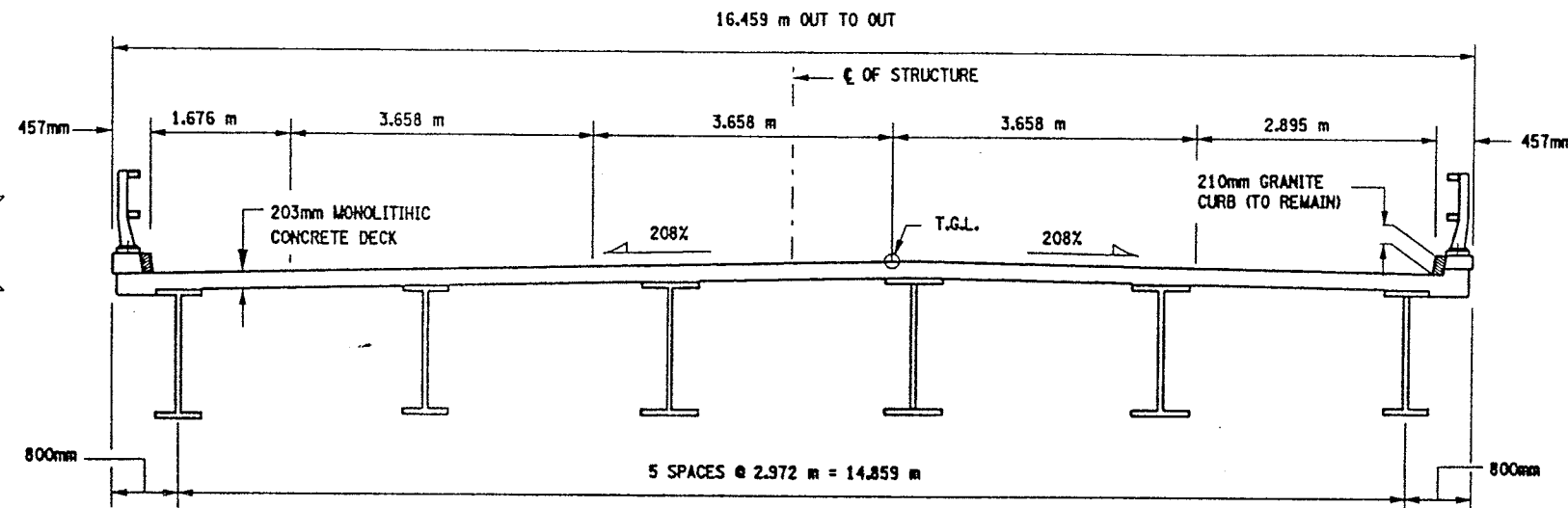
SEE DWG. GP16-1 FOR WORK TO BE DONE ON BIN 1093561.

"MAC" JOINT IS A MODIFIED ARMORED JOINT SYSTEM WITH COMPRESSION SEAL.

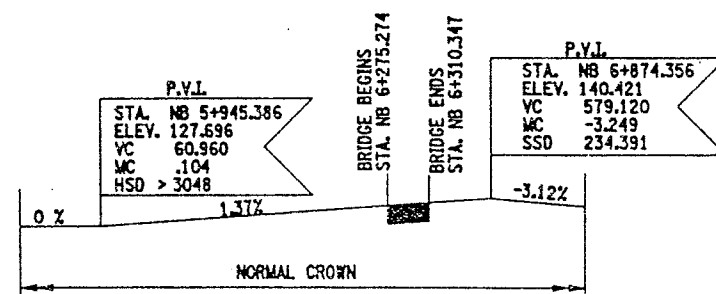
UTILITIES BELONGING TO "NEWCHANNEL CORP." AND ELECTRIC UTILITIES IN VICINITY OF THESE STRUCTURES. SEE INFORMATION AVAILABLE TO BIDDERS FOR ADDITIONAL DETAILS.



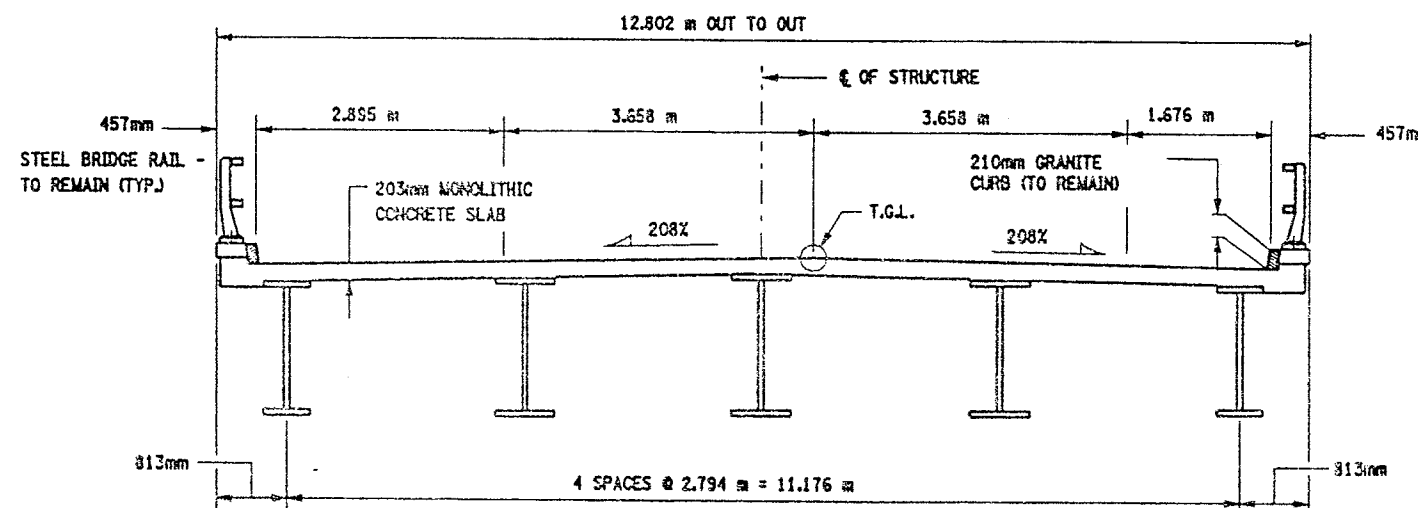
PROFILE
1093561 SB
NOT TO SCALE



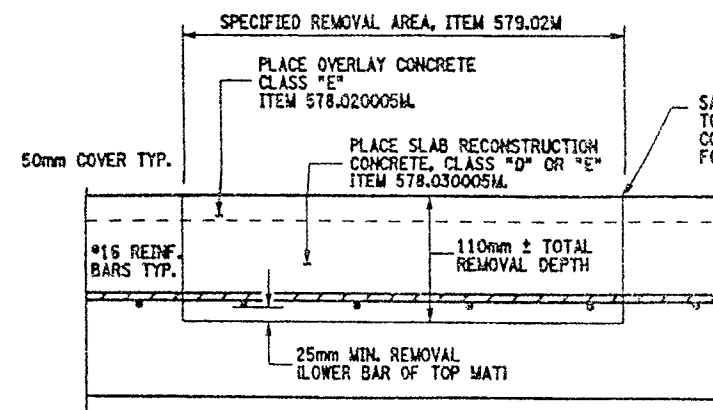
SECTION
1093562 NB
NOT TO SCALE



PROFILE
1093562 NB
NOT TO SCALE



SECTION
1093561 SB
NOT TO SCALE



CROSS SECTION VIEW THROUGH REPAIR LOCATION
NOT TO SCALE

DECK REPAIR NOTES:

THIS LOCATION IS CURRENTLY FILLED WITH ASPHALT (BLACKTOP). DEPTH OF ASPHALT IS UNKNOWN, ESTIMATED AT 38mm. THE REMOVAL OF THE ASPHALT AND CONCRETE TO LIMITS SHOWN TO BE PAID UNDER ITEM 579.02M.

REMOVE CONCRETE TO LIMITS SHOWN AND TO SOUND CONCRETE AS ORDER BY ENGINEER.

THE AREA THAT IS REPAIRED SHALL ALSO RECEIVE:

ITEM 558.01M - TRANSVERSE SAWCUT GROOVING
ITEM 18559.1896M - PROTECTIVE SEALING

THE AREA SHOWN IS THE RESULT OF FIELD INVESTIGATION AND IS AN APPROXIMATE AREA. THE ACTUAL LIMITS SHALL BE AS DIRECTED BY ENGINEER.

NO FULL DEPTH SLAB REPAIR IS EXPECTED AT THIS LOCATION.

REFER TO DRAWING NO. CN-1 FOR SERIALIZED ITEM NOTES.

ITEMS USED:

ITEM 558.01M - TRANSVERSE SAWCUT GROOVING (SM)
ITEM 18559.1896M - PROTECTIVE SEALING FOR STRUCT. CONC. (SM)
ITEM 578.020005M - OVERLAY CONCRETE, CLASS "E" (SM)
ITEM 578.030005M - SLAB RECONSTRUCTION CONCRETE, CLASS "D" OR "E" (SM)
ITEM 579.02M - REINFORCING BAR EXPOSURE (SM)

WORK TO BE DONE ON BIN 1093562- (NOT NECESSARILY IN THIS ORDER)

1. ESTABLISH MPAT SCHEME FOR STAGE CONSTRUCTION.
2. REMOVE EXISTING BRIDGE JOINT, END ABUTMENT (NORTH), TO INCLUDE REMOVAL OF THE ARMORING DECK ANGLE.
3. REMOVE EXISTING ARMORING DECK ANGLE AT BEGINNING ABUTMENT, (SOUTH).
4. INSTALL PROPOSED BRIDGE JOINT AT END ABUTMENT, ("MAC" JOINT).
5. REPAIR DECK AREA AT BEGINNING ABUTMENT WHERE THE ARMORING DECK ANGLE WAS REMOVED.
6. PERFORM MINOR REPAIRS TO ASPHALT APPROACHES.
7. PERFORM MISCELLANEOUS REPAIRS TO CONCRETE ELEMENTS AT BOTH ABUTMENTS.
8. REMOVE EXISTING BRIDGE DECK ASPHALT PATCH.
9. PLACE NEW CONCRETE BRIDGE DECK PATCH.

ALL DIMENSIONS ARE IN m UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

SIGNATURE DATE

INTERSTATE 481
OVER
ROUTE 290
TYPICAL BRIDGE SECTION AND PROFILE

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME REGION DATE DRAWING NO.
305613AG.G1A 3 10/02 TS16-1

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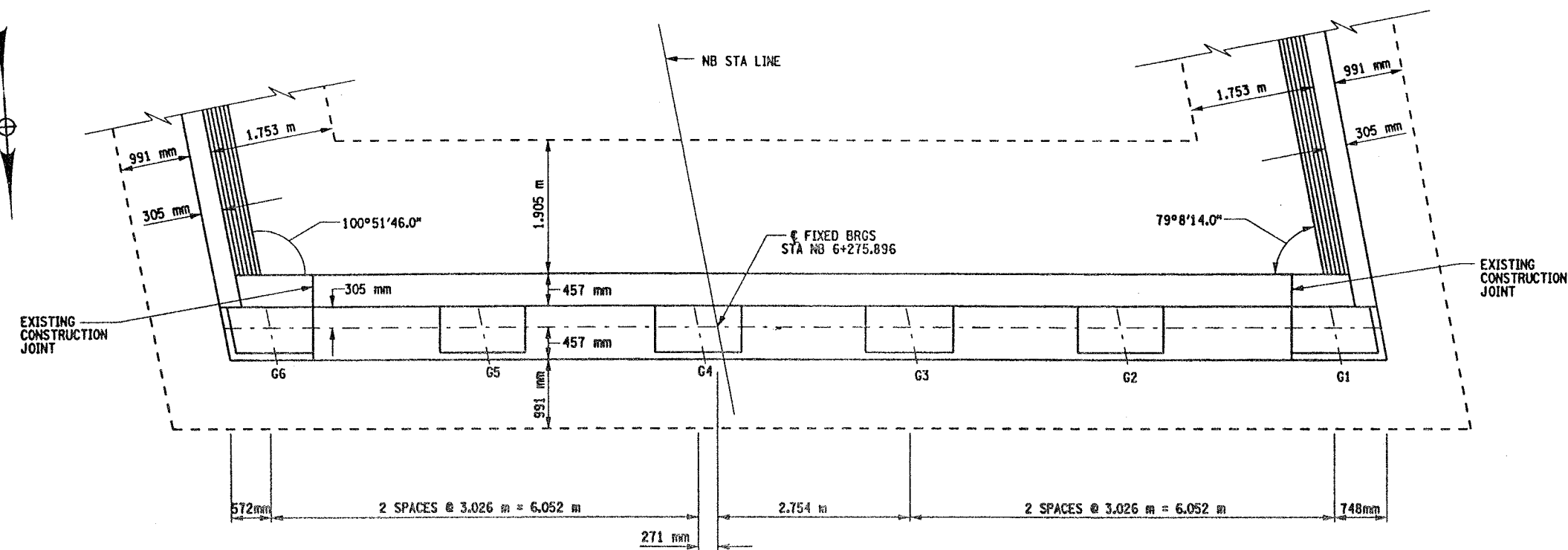
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FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259214	283	432
BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)				
VARIOUS BRIDGES ON INTERSTATE 481				
TOWNS OF DEWITT AND CICERO				
ONONDAGA COUNTY				
P.I.N. 305613			B.I.N. 1093562	

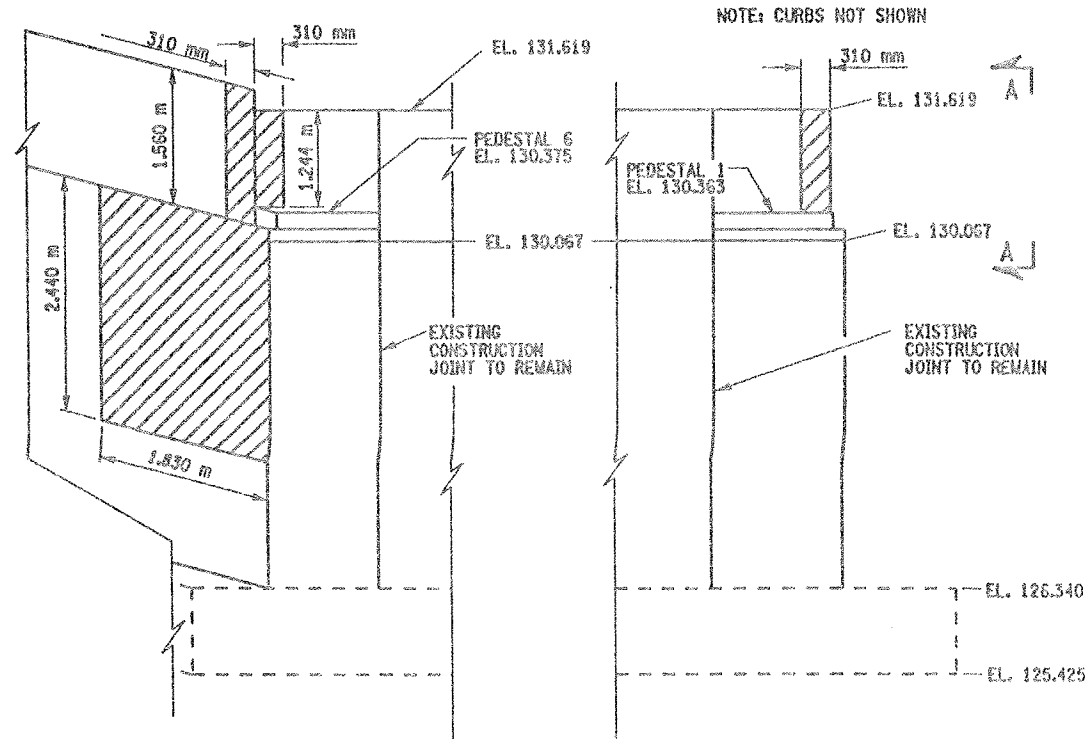
NOTES:

1. ALL DIMENSIONS SHOWN FOR CONCRETE REMOVAL ARE APPROXIMATE AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR AND EIC.
2. REMOVE CONCRETE TO LIMITS SHOWN AS WELL AS TO SOUND CONCRETE, A.O.B.E.
3. WHEN REMOVING EXISTING CONCRETE, SAWCUT 5 mm MIN. TO PRODUCE NEAT REMOVAL LINES. ANY COST TO BE INCLUDED IN THE BID PRICE FOR ITEM 582.05M.
4. ALL EXISTING REINFORCEMENT TO REMAIN.
5. ELEVATIONS ARE GIVEN FOR QUANTITY ESTIMATES ONLY.
6. REFER TO CONTRACT FISH 70-7 FOR ORIGINAL CONSTRUCTION DETAILS AND D251436 FOR ADDITIONAL DETAILS.

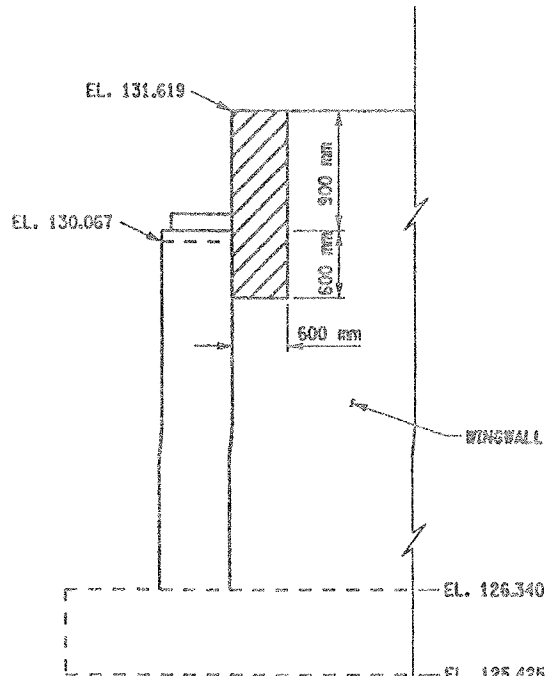
AREAS OF PROPOSED WORK: ITEM 582.05M
REMOVAL OF STRUCTURAL CONCRETE-
REPLACEMENT WITH CLASS A CONCRETE



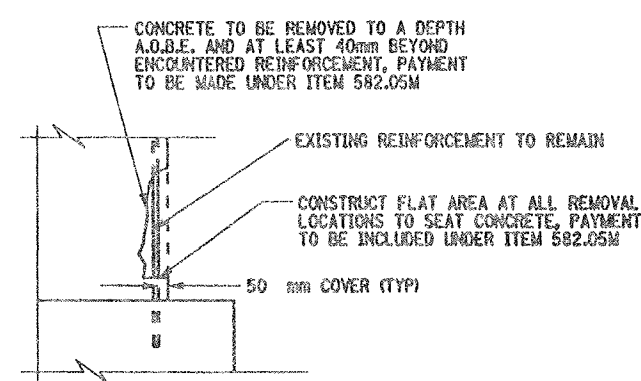
PLAN
SCALE 1:40



ELEVATION
SCALE 1:40



SECTION A-A
NOT TO SCALE



REMOVAL DETAIL
NOT TO SCALE

LIST OF ITEMS USED:
ITEM 582.05M - REMOVAL OF STRUCTURAL CONCRETE
REPLACEMENT WITH CLASS A CONCRETE (CM)

ALL DIMENSIONS ARE IN m UNLESS OTHERWISE NOTED
AS BUILT REVISIONS

SIGNATURE DATE

INTERSTATE 481 NB
OVER
ROUTE 290

SOUTH ABUTMENT
PLAN AND ELEVATION

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

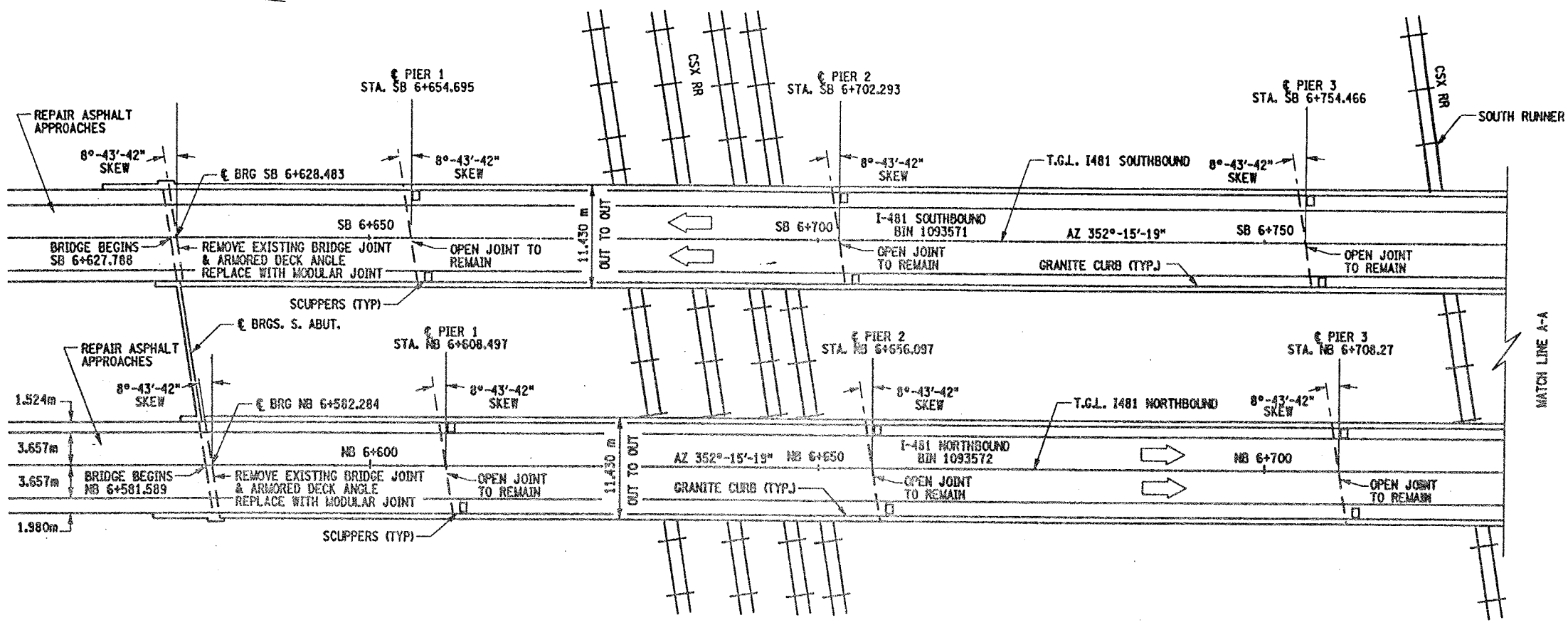
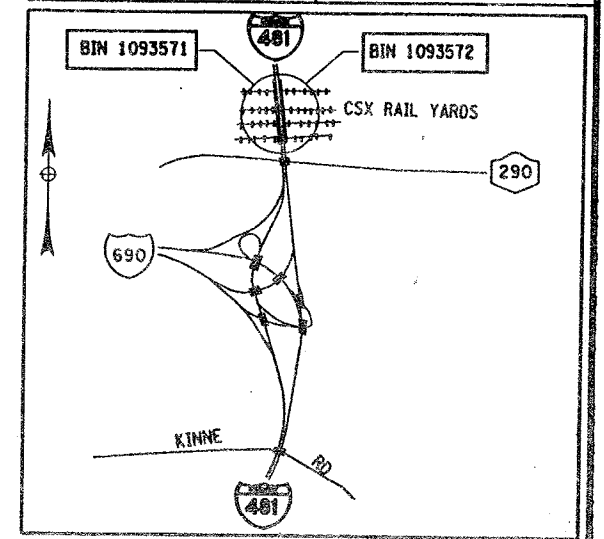


FILENAME	REGION	DATE	DRAWING NO.
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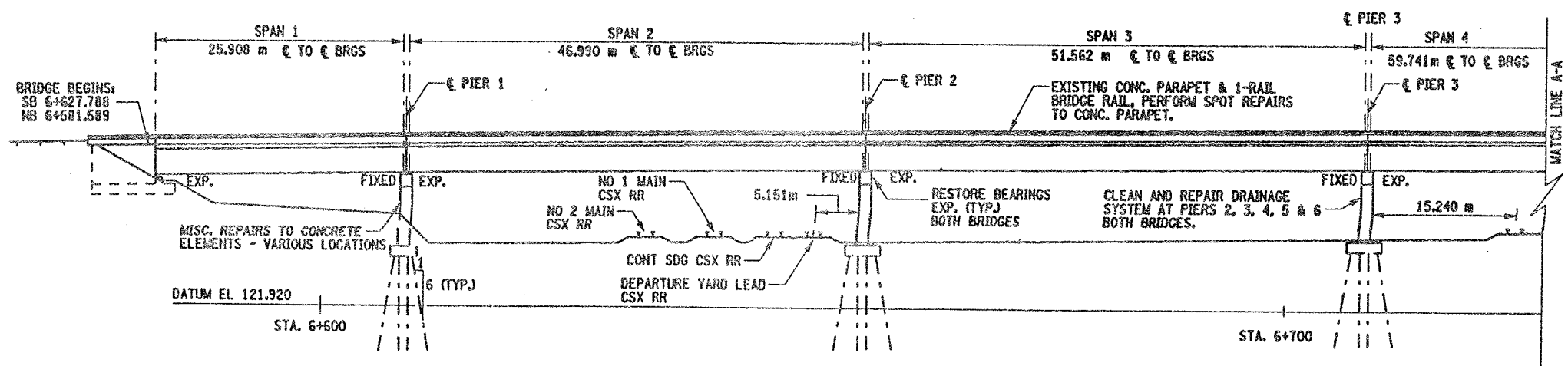
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JOB MANAGER
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FED. ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259214	284	432

BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)
VARIOUS BRIDGES ON INTERSTATE 481
TOWNS OF DEWITT AND CICERO
ONONDAGA COUNTY
P.I.N. 305613 B.I.N. 1093571 & 1093572



PLAN
SCALE 1:300



ELEVATION
SCALE 1:300

NOTES:

SEE DWG. GP17-2 FOR WORK TO BE DONE ON BIN 1093571
AND DWG. GP17-3 FOR WORK TO BE DONE ON BIN 1093572.
REFER TO DWG. NO. JT-3 AND JT-4 FOR BRIDGE JOINT INFORMATION.
ELECTRIC UTILITY IN THE VICINITY OF BRIDGES. SEE
INFORMATION AVAILABLE TO BIDDERS FOR ADDITIONAL INFORMATION.

BIN 1093571 SOUTHBOUND
BIN 1093572 NORTHBOUND

ALL DIMENSIONS ARE IN m UNLESS OTHERWISE NOTED
AS BUILT REVISIONS

SIGNATURE	DATE
INTERSTATE 481 OVER CSX RAILROAD YARD PLAN AND ELEVATION 1 OF 4	
STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION	
FILENAME 305613AE.G1A	REGION 3
DATE 10/02	DRAWING NO. GP17-1

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JOB MANAGER

DESIGN SUPERVISOR

BRIDGE JOINT TABLE

B.I.N. NUMBER	JOINT LOCATION	JOINT SKEW	SPAN(S) LENGTH FOR JOINT (METERS)	JOINT BEND LOCAT'N		EXISTING JOINT TYPE	PROPOSED JOINT TYPE	CURB TO CURB DISTANCE (METERS) (SEE NOTES)	FASCIA & MEDIAN LENGTH (METERS) LT/RT	TOTAL LENGTH (METERS)	JOINT ITEM NUMBER(S)	DRAWING NUMBER		
				RT	LT							SECT VIEW	PLAN VIEW	FASCIA DETAIL
1093520	WEST ABUT.	10°-00'-00"	—	N	N	ADA	—	9.286	.464/.464	10.214	—	JD-47	—	JD-47
	EAST ABUT.	3°-00'-00"	39.014	N	N	ACJ/ADA	RCS	9.157	.458/.458	10.073	16567.64M	JD-47	—	JD-47
1093540	WEST ABUT.	3°-00'-00"	—	N	N	ACJ/ADA	RCS	9.157	.458/.458	10.073	16567.64M	JD-47	—	JD-47
	EAST ABUT.	3°-00'-00"	35.662	N	N	ADA	—	9.157	.458/.458	10.073	—	JD-47	—	JD-47
1093550	SOUTH ABUT.	51°-00'-00"	—	N	N	OPEN/ADA	RADA	18.890	.726/.726	20.342	—	JD-49	JD-48	—
	NORTH ABUT.	51°-00'-00"	45.750	N	N	ADA	RADA	18.890	.726/.726	20.342	—	JD-49	JD-48	—
1093561	SOUTH ABUT.	10°-51'-46"	—	N	N	ADA	RADA	12.104	.465/.465	13.034	—	JD-51	JD-50	JD-52
	NORTH ABUT.	10°-51'-46"	33.832	N	N	ACJ/ADA	MAC-5	12.104	.465/.465	13.034	567.35M	JD-51	JD-50	JD-52
1093562	SOUTH ABUT.	10°-51'-46"	—	N	N	ADA	RADA	15.828	.465/.465	16.758	—	JD-51	JD-50	JD-52
	NORTH ABUT.	10°-51'-46"	33.832	N	N	ACJ/ADA	MAC-5	15.828	.465/.465	16.758	567.35M	JD-51	JD-50	JD-52
1093571	SOUTH ABUT.	8°-43'-42"	26.212	N	N	ACJ/ADA	MOD-1	10.330	.616/.616	11.562	566.01M	JD-55	JD-53	JD-56
	PIER 1	8°-43'-42"	46.939	N	N	OPEN	NONE	10.330	.616/.616	11.562	—	JD-56	—	—
	PIER 2	8°-43'-42"	51.511	N	N	OPEN	NONE	10.330	.616/.616	11.562	—	JD-56	—	—
	PIER 3	8°-43'-42"	59.740	N	N	OPEN	NONE	10.330	.616/.616	11.562	—	—	—	—
	PIER 4	8°-43'-42"	59.740	N	N	OPEN	NONE	10.330	.616/.616	11.562	—	—	—	—
	PIER 5	8°-43'-42"	59.740	N	N	OPEN	NONE	10.330	.616/.616	11.562	—	—	—	—
	PIER 6	8°-43'-42"	37.490	N	N	ACJ	MOD-1	10.330	.616/.616	11.562	566.01M	JD-55	JD-54	JD-56
	PIER 7	8°-43'-42"	37.490	N	N	ACJ	MOD-1	10.330	.616/.616	11.562	566.01M	JD-55	JD-54	JD-56
	PIER 8	8°-43'-42"	37.490	N	N	ACJ	MOD-1	10.330	.616/.616	11.562	566.01M	JD-55	JD-54	JD-56
	PIER 9	8°-43'-42"	44.196	N	N	OPEN	NONE	10.330	.616/.616	11.562	—	JD-56	—	—
	PIER 10	0°-00'-00"	37.643	N	N	ACJ	MOD-1	10.210	.610/.610	11.430	566.01M	JD-55	JD-54	JD-56
	PIER 11	0°-00'-00"	37.643	N	N	ACJ	MOD-1	10.210	.610/.610	11.430	566.01M	JD-55	JD-54	JD-56
	PIER 12	0°-00'-00"	37.643	N	N	ACJ	MOD-1	10.210	.610/.610	11.430	566.01M	JD-55	JD-54	JD-56
	PIER 13	0°-00'-00"	37.643	N	N	ACJ	MOD-1	10.210	.610/.610	11.430	566.01M	JD-55	JD-54	JD-56
	PIER 14	0°-00'-00"	37.643	N	N	ACJ	MOD-1	10.210	.610/.610	11.430	566.01M	JD-55	JD-54	JD-56
	NORTH ABUT.	0°-00'-00'	—	N	N	ADA	RADA	10.210	.610/.610	11.430	—	JD-55	JD-54	—

INFORMATIONAL NOTES:

BDN 1093550 & 1093571

CLEAN EXISTING DRAINAGE SYSTEMS AT OPEN JOINTS (OPEN JOINTS TO REMAIN), AS SHOWN ON CONTRACT PLANS OR AS DIRECTED BY THE ENGINEER.

FOR JOINT DETAILS REFER TO THE FOLLOWING DRAWINGS;

DWG. NO. JD-1 - MODIFIED ARMORED COMPRESSION SEAL JOINT SYSTEM.
DWG. NO. JD-24 - ONE-CELL MODULAR JOINT SYSTEM.
DWG. NO. JD-25 - TWO-CELL MODULAR JOINT SYSTEM.

LIST OF BRIDGE JOINT ITEMS USED:

ITEM 566.01M - MODULAR EXP. JOINT SYSTEM ONE-CELL (M)
ITEM 566.02M - MODULAR EXP. JOINT SYSTEM TWO-CELL (M)
ITEM 567.31M - MODIFIED ARMORED JOINT SYSTEM W/ COMP. SEAL TYPE A1 (M)
ITEM 567.32M - MODIFIED ARMORED JOINT SYSTEM W/ COMP. SEAL TYPE A2 (M)
ITEM 567.35M - MODIFIED ARMORED JOINT SYSTEM W/ COMP. SEAL TYPE A5 (M)
ITEM 567.36M - MODIFIED ARMORED JOINT SYSTEM W/ COMP. SEAL TYPE A6 (M)
ITEM 16567.640001M - REPLACE COMPRESSION SEAL FOR EXISTING BRIDGE JOINTS (M)
ITEM 580.01M - REMOVAL OF STRUCT. CONC. (CM)

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259214	363	432
BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)				
VARIOUS BRIDGES ON INTERSTATE 481				
TOWNS OF DEWITT AND CICERO				
ONONDAGA COUNTY				
P.I.N. 305613		B.I.N. ALL BINS		

LEGEND

EXISTING JOINT TYPE:

ACJ = ARMORED COMPRESSION JOINT SYSTEM
MOD = MODULAR JOINT SYSTEM
MAC = MODIFIED ARMORED COMPRESSION SYSTEM (NO HORIZ. ARMORING ANGLE)
ADA = ARMORED DECK ANGLE
SS = STRIP SEAL JOINT
OPEN = OPEN JOINT

PROPOSED JOINT TYPE:

MAC-1 = MOD. ARM./COMP. SEAL JT. SYS. (A-1)
MAC-2 = MOD. ARM./COMP. SEAL JT. SYS. (A-2)
MAC-5 = MOD. ARM./COMP. SEAL JT. SYS. (A-5)
MAC-6 = MOD. ARM./COMP. SEAL JT. SYS. (A-6)
RCS = REPLACE EXISTING COMPRESSION SEAL
RADA = REMOVE ARMOR DECK ANGLE
MOD-1 = MODULAR JT. SYS. (ONE-CELL)
MOD-2 = MODULAR JT. SYS. (TWO-CELL)

JOINT BEND LOCATION:

N = NO BENDS
CRB = CURB LINE
PAV'T = PAVEMENT

GENERAL NOTES:

- ALL MEASUREMENTS SHALL BE FIELD VERIFIED.
- CURB TO CURB LENGTHS ARE MEASURED ALONG C OF JOINT.
- MULTIPLE DIMENSIONS ARE SHOWN LOOKING UP-STATION, LEFT TO RIGHT.
- ALL DIMENSIONS ARE SHOWN IN METERS.

ALL DIMENSIONS ARE IN m UNLESS OTHERWISE NOTED
AS BUILT REVISIONS

SIGNATURE DATE

INTERSTATE 481 VARIOUS BRIDGES

BRIDGE JOINT TABLE



STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

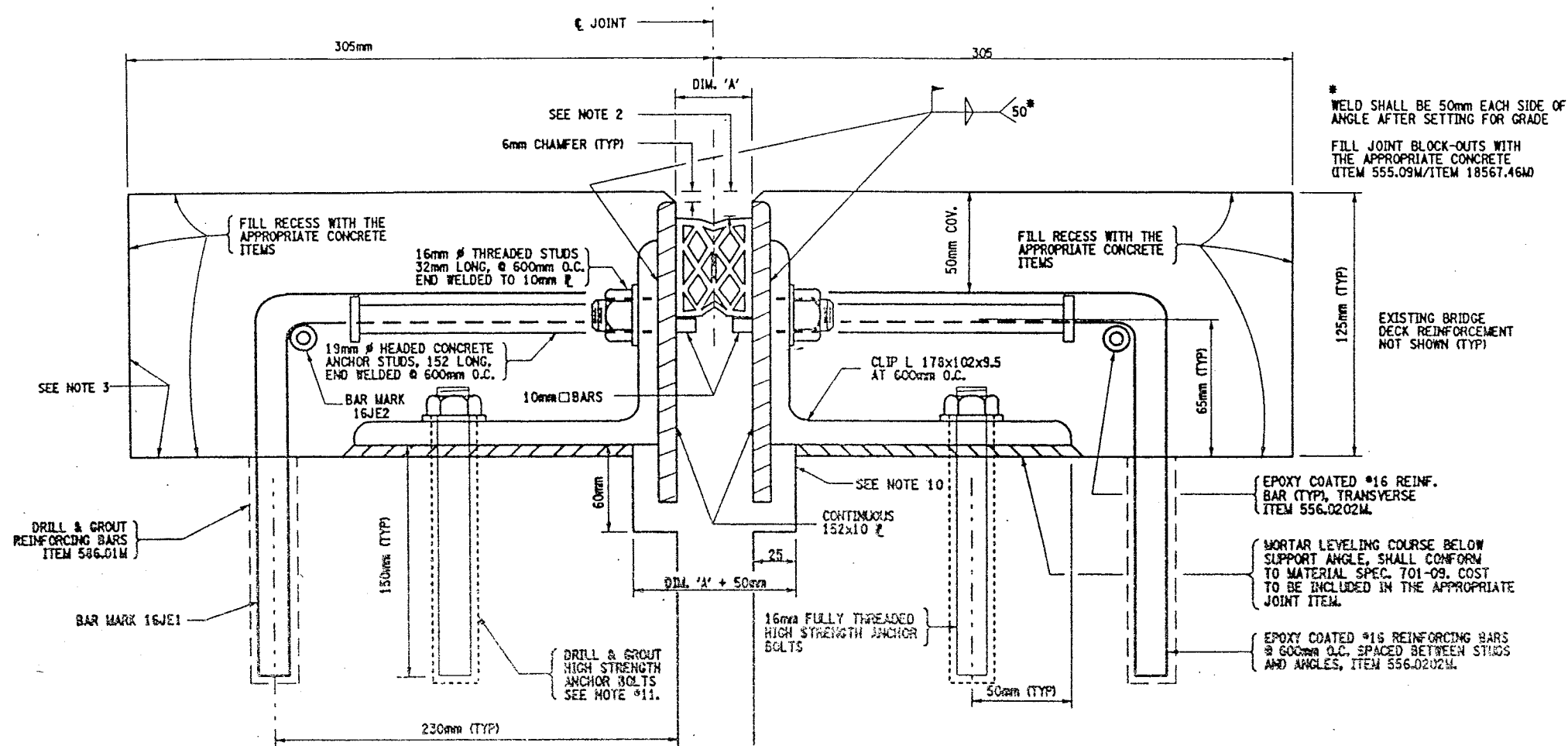
FILENAME	REGION	DATE	DRAWING NO.
305613AJ.JAI	3	10/02	JT-3

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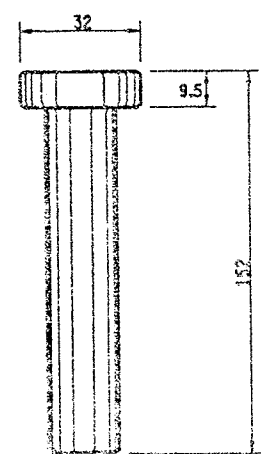
FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	0259214	365	432
BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)				
VARIOUS BRIDGES ON INTERSTATE 481				
TOWNS OF DEWITT AND CICERO				
ONONDAGA COUNTY				
P.I.N. 305613			B.I.N. ALL BIN'S	

GENERAL NOTES:

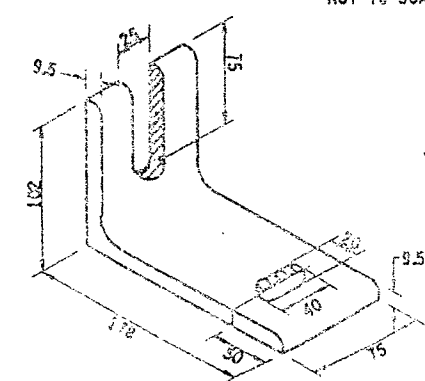
1. THE TEMPERATURE OF THE BRIDGE MUST BE TAKEN ON THE STRUCTURAL STEEL SURFACE TO DETERMINE THE TEMPERATURE CORRECTION FOR THE JOINT OPENINGS.
2. THIS DEPTH SHALL BE INDICATED ON THE SHOP DRAWINGS AND SHALL BE SUCH THAT WHEN THE SEAL IS COMPRESSED TO 50% OF ITS NORMAL WIDTH, THE TOP OF THE SEAL SHALL BE NOT LESS THAN 6mm NOR MORE THAN 19mm BELOW THE TOP OF THE ROADWAY.
3. RECESSES RECEIVING ITEM 555.09M. AFTER SURFACE PREPARATION, THOROUGHLY WET THE CONCRETE SURFACE AND ALL POROUS SURFACES TO BE IN CONTACT WITH NEW CONCRETE, FOR 12 HOURS. NOTE THE USE OF MATERIAL SPECIF. 705-22 PORTLAND CEMENT MORTAR BONDING GROUT HAS BEEN ELIMINATED, SEE INSERT IN PROJECT PROPOSAL.
4. A WATER-TIGHT INTEGRITY TEST SHALL BE PERFORMED BY THE CONTRACTOR AT ALL COMPRESSION SEAL JOINT INSTALLATIONS. THE FOLLOWING TEST PARAMETERS SHALL BE INCORPORATED IN THE TEST:
 1. A 15 MINUTE MINIMUM PERIOD OF STANDING WATER, WITH A 25mm MINIMUM DEPTH SHALL BE USED.
 2. IN ADDITION, IN LOCATIONS OF COPED AREAS OF THE SEAL, BENDS, ETC., WATER PRESSURE SHALL BE APPLIED, TO THE SATISFACTION OF THE EIC FOR A 15 MINUTE PERIOD.
 3. LIMITS OF TEST AREA SHALL BE FROM FACE OF CURB TO FACE OF CURB ON THE DECK SURFACE.
5. NO PAYMENT WILL BE MADE TO THE CONTRACTOR FOR THE JOINT IF, IN THE OPINION OF THE ENGINEER, THE INSTALLED JOINT LEAKS WITHIN THE 15 MINUTE TEST PERIOD.
6. PRIOR TO THE START OF WORK AT EACH JOINT, THE CONTRACTOR SHALL SUBMIT A WRITTEN PLAN FOR THE SPECIFICS OF THE TESTING, INCLUDING CONTAINMENT OF THE WATER AND THE METHOD TO BE USED FOR ACCESS BY THE E.I.C. TO THE BOTTOM OF THE JOINT BEING TESTED.
7. THE COST OF ALL LABOR, EQUIPMENT AND MATERIALS REQUIRED FOR THE TESTING WHICH INCLUDES, BUT IS NOT LIMITED TO:
 1. A CONTAINMENT SYSTEM FOR THE TEST WATER.
 2. PROVISIONS FOR E.I.C. ACCESS TO THE BOTTOM OF THE JOINT. SHALL BE INCLUDED IN THE PRICE BID FOR THE RESPECTIVE JOINT ITEMS.
8. THE COST OF ALL LABOR, EQUIPMENT, AND MATERIALS TO INSTALL THE NEW JOINT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE APPROPRIATE JOINT ITEM.
9. MORTAR LEVELING COURSE SHALL CONFORM TO MATERIAL SPECIFICATION 701-09 AND SHALL BE INCLUDED IN THE PRICE BID FOR THE APPROPRIATE JOINT ITEM.
10. THE DIMENSIONS OF THE REMOVAL AREA UNDER THE 152x10 PLATES ARE SHOWN TO ALLOW SPACE FOR THE PLATES TO REST FREELY. IF THERE IS ALREADY ADEQUATE SPACE, NO CONCRETE REMOVAL OR REPLACEMENT IS REQUIRED IN THIS AREA.
11. 16 mm # ASTM A325M ANCHOR BOLT TO BE DRILLED AND GROUTED IN PLACE IN ACCORDANCE WITH THE REQUIREMENTS OF SUB-SECTION 586-3.02. GROUTING MATERIALS SHALL BE IN ACCORDANCE WITH MATERIALS SUB-SECTION 701-07 ANCHORING MATERIALS-CHEMICALLY CURING. HOLES TO BE DRILLED TO THE DIAMETER AND DEPTH RECOMMENDED BY THE MANUFACTURER OF THE GROUTING MATERIAL Q.M. DEPTH OF 150 mm. THE COST OF THE ANCHORS, INCLUDING DRILLING AND GROUTING, SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE APPROPRIATE JOINT SYSTEM ITEM.
12. IT IS DESIRABLE TO HAVE THE ARMORED JOINT WITH ITS COMPRESSION SEAL ASSEMBLED IN THE SHOP AND DELIVERED TO THE JOB SITE ALL SET FOR INSTALLATION IN ITS PREFORMED RECESS IN THE STRUCTURAL SLAB, IN CASES WHERE THE ARMORED JOINT CANNOT BE ASSEMBLED IN THE SHOP, DUE TO ITS EXCESSIVE LENGTH CAUSING SHIPPING PROBLEMS, THE JOINT SHALL BE SEALED WITH THE COMPRESSION SEAL BEFORE THE STRUCTURE IS OPENED TO TRAFFIC INCLUDING CONSTRUCTION TRAFFIC, AND BEFORE DIS CONTINUING OPERATIONS WHEN WORK IS SUSPENDED DURING THE WINTER.



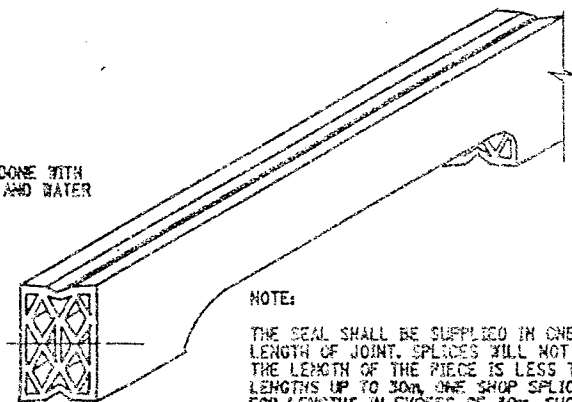
MODIFIED ARMORED COMPRESSION JOINT DETAIL
FOR INSTALLATION LOCATIONS SEE JOINT TABLE
NOT TO SCALE



DETAIL OF HEADED CONCRETE ANCHOR STUD
NOT TO SCALE



DETAIL OF CLIP ANGLE
NOT TO SCALE



DETAIL FOR CUTTING SEAL
NOT TO SCALE

EPOXY POLYSULFIDE GROUT NOTE:
CONTRACTOR MAY WITH THE APPROVAL OF THE ENGINEER USE MATERIAL SPECIFICATION 721-03 EPOXY POLYSULFIDE GROUT, AT THE RECESSES, INSTEAD OF THE 12 HOUR CONTINUOUS PREWETTING REQUIREMENTS (PROJECT PROPOSAL). CONTRACTOR MUST ENSURE PROPER CONSTRUCTION PRACTICES ARE FOLLOWED WHEN USING THIS GROUT. THE USE OF EPOXY POLYSULFIDE GROUT SHALL BE AT NO ADDITIONAL COST TO THE STATE.

SEALS (mm)			ARMORED JOINT SYSTEM	
TYPE	NOMINAL WIDTH	DIM. "A" @ 20°C.	TYPE	END CONDITION
1	44	25	A1	Fixed End Only
2	51	30	A2	Exp. up to 18 m
3	54	38	A3	Exp. over 18 m to 23 m
4	76	44	A4	Exp. over 23 m to 27 m
5	89	52	A5	Exp. over 27 m to 38 m
6	102	60	A6	Exp. over 38 m to 46 m

Maximum Skew Limits: Fixed End - No Limit
Exp. End - 45° A2 thru A6

LIST OF ITEMS USED:

- ITEM 555.09M - STRUCT. CONCRETE, CLASS "HP" (CM)
- ITEM 556.0202M - EPOXY COATED BAR REINF. FOR STRUCT. (CM)
- ITEM 567.31M - MOD. ARMORED JOINT SYSTEM W/ COMP. SEAL TYPE A1 (M)
- ITEM 567.32M - MOD. ARMORED JOINT SYSTEM W/ COMP. SEAL TYPE A2 (M)
- ITEM 567.33M - MOD. ARMORED JOINT SYSTEM W/ COMP. SEAL TYPE A3 (M)
- ITEM 567.36M - MOD. ARMORED JOINT SYSTEM W/ COMP. SEAL TYPE A6 (M)
- ITEM 18567.46M - ELASTOMERIC CONC. FOR BRIDGE JT. SYSTEMS (M)
- ITEM 586.01M - DRILL & GROUT REINF. BARS (mm)

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED
AS BUILT REVISIONS

SIGNATURE DATE

INTERSTATE 481
COMPRESSION SEAL JOINT DETAILS

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

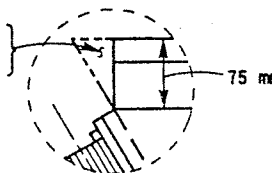
FILENAME REGION DATE DRAWING NO.
305613AJ.JAI 3 10/02 JD-1

FED. ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259214	414	432
BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)				
VARIOUS BRIDGES ON INTERSTATE 481				
TOWNS OF DEWITT AND CICERO				
ONONDAGA COUNTY				
P.I.N. 305613		B.I.N. 1093561 & 1093562		

NOTES:

1. REMOVAL OF ARMORING DECK ANGLE & ANCHORAGE SHALL BE FROM CURB TO CURB.
2. FOR SECTION VIEWS SEE DWG. NO. JD-51 AND JD-52.
3. BOTH STRUCTURES HAVE 10°-51'-46" SKEW.
4. ACTUAL BRIDGE JOINT BLOCK-OUT DIMENSIONS MAY VARY. REMOVAL LIMITS SHALL BE TO EXISTING BLOCK-OUT LOCATIONS OR AS DIRECTED BY ENGINEER.
5. LEFT SIDE OF DECK SHOWN, RIGHT SIDE IDENTICAL.
6. REFER TO DWG. NO. JT-3 FOR ADDITIONAL DETAILS.
7. SAW CUTTING OF CONCRETE SHALL BE INCLUDED IN PRICE BID FOR ITEM 580.01M.

SQUARE OFF THIS PORTION OF SUPERSTRUCTURE SLAB



DETAIL "S"
NOT TO SCALE

WORK TO BE DONE:

BIN 1093561 - REMOVE ARMORING DECK ANGLE AT BEG. (SOUTH) ABUTMENT. REPLACE THE EXISTING BRIDGE JOINT AND REMOVE THE ARMORING DECK ANGLE AT END (NORTH) ABUTMENT.

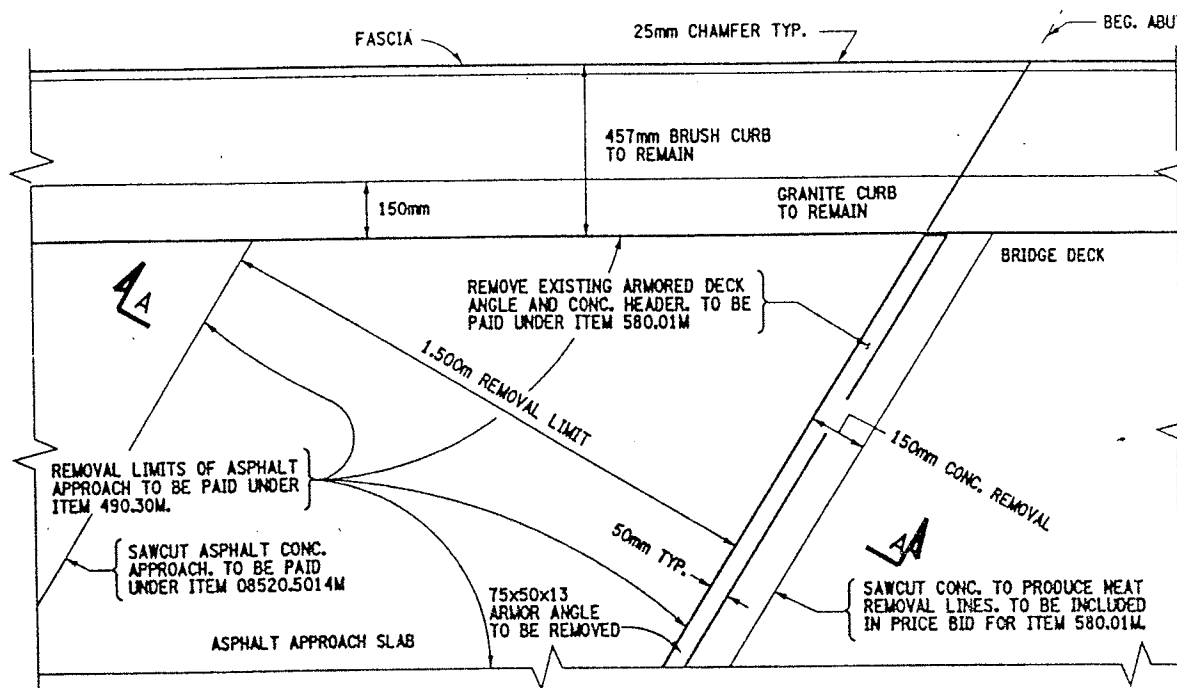
BIN 1093562 - REMOVE ARMORING DECK ANGLE AT BEG. (SOUTH) ABUTMENT. REPLACE THE EXISTING BRIDGE JOINT AND REMOVE THE ARMORING DECK ANGLE AT END (NORTH) ABUTMENT.

ITEMS USED:

- | | |
|------------------|---|
| ITEM 490.30M | - MISC. COLD MILLING OF BIT. CONC. (SM) |
| ITEM 08520.5014M | - SAWCUTTING BIT. CONC. (M) |
| ITEM 555.09M | - STRUCT. CONCRETE, CLASS "HP" (CM) |
| ITEM 556.0202M | - EPOXY-COATED BAR REINFORCEMENT FOR STRUCT. (M) |
| ITEM 567.35M | - MOD. ARMORED JOINT SYSTEM W/ COMP. SEAL TYPE A5 (M) |
| ITEM 580.01M | - REMOVAL OF STRUCT. CONCRETE (CM) |

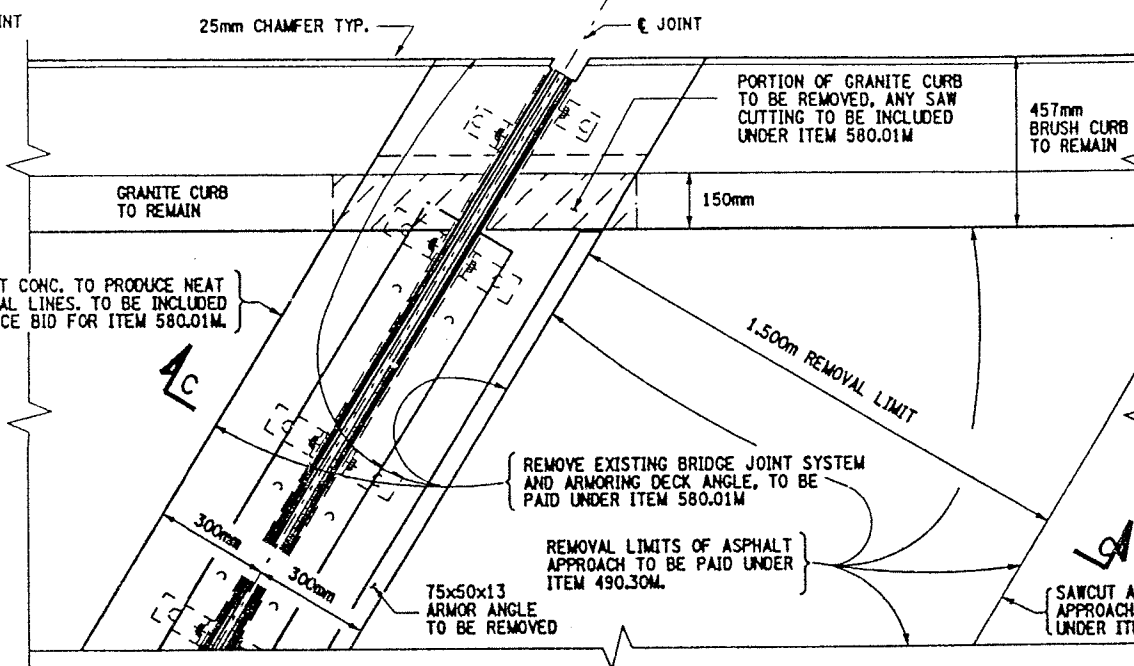
ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED
AS BUILT REVISIONS

SIGNATURE	DATE
INTERSTATE 481 NB & SB OVER ROUTE 290 BRIDGE JOINT DETAILS	
STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION	
FILENAME 305613AJ.JA1	REGION 3
DATE 10/02	DRAWING NO. JD-50



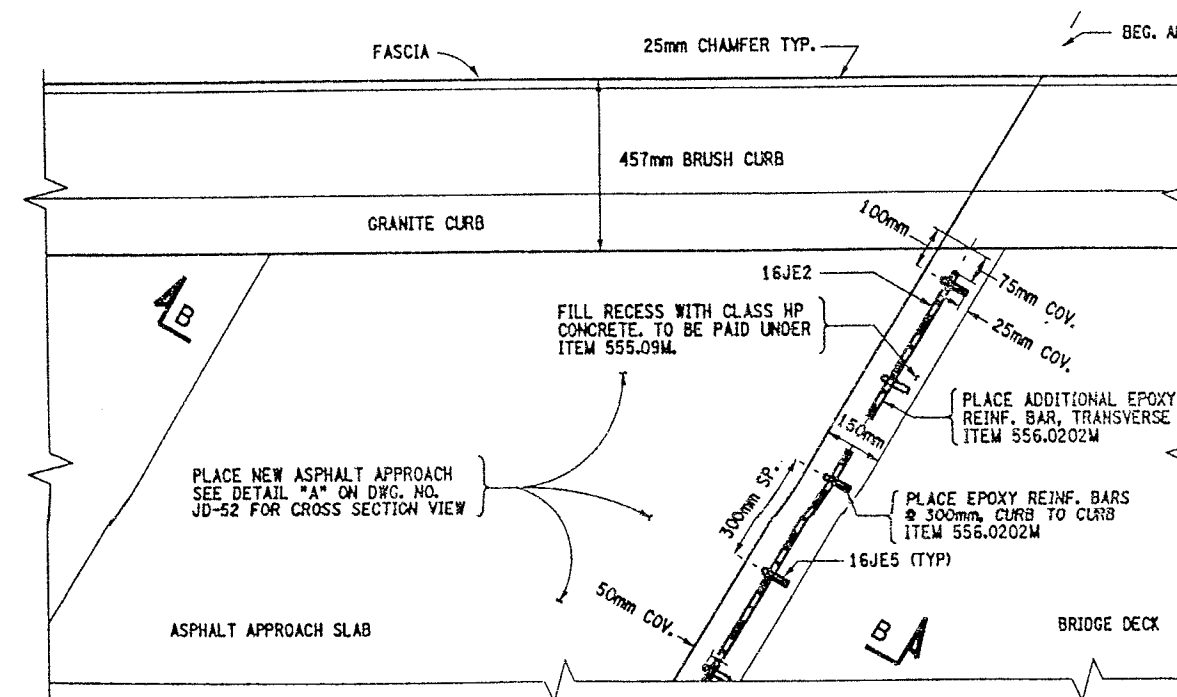
EXISTING BEG. ABUTMENT PLAN VIEW

BIN 1093561 - SOUTH ABUT.
BIN 1093562 - SOUTH ABUT.



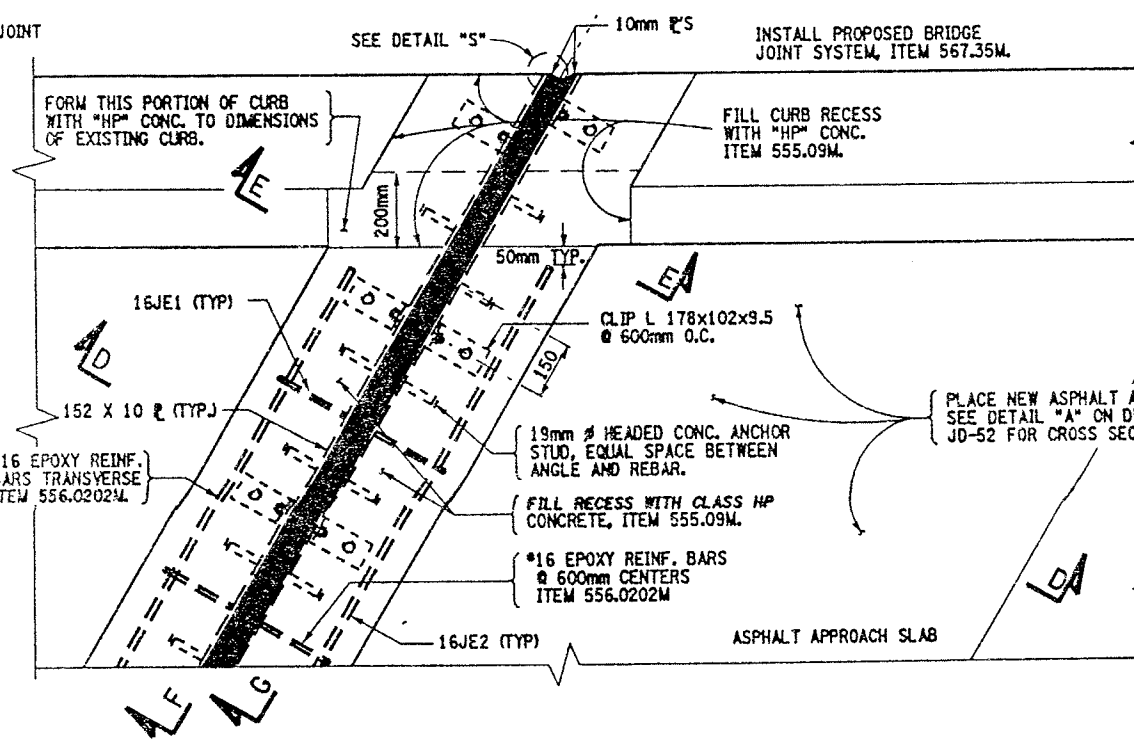
EXISTING END ABUTMENT PLAN VIEW

BIN 1093561 - NORTH ABUT.
BIN 1093562 - NORTH ABUT.



PROPOSED BEG. ABUTMENT PLAN VIEW

BIN 1093561 - SOUTH ABUT.
BIN 1093562 - SOUTH ABUT.



PROPOSED END ABUTMENT PLAN VIEW

BIN 1093561 - NORTH ABUT.
BIN 1093562 - NORTH ABUT.

CHECKED BY
DRAFTED BY
ESTIMATED BY
DESIGNED BY
JOB MANAGER
DESIGN SUPERVISOR

CHECKED BY

DRAFTED BY

ESTIMATED BY

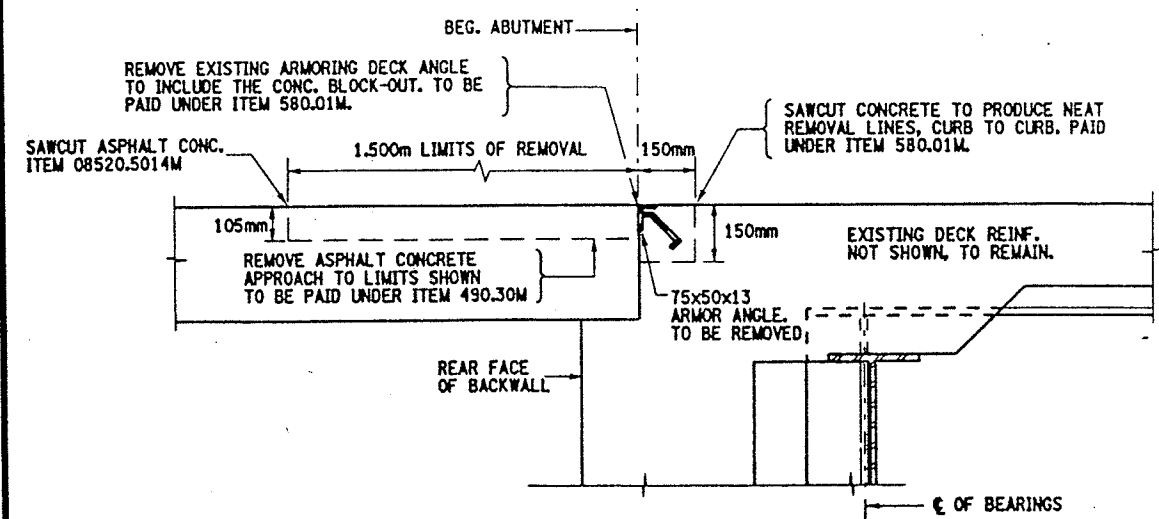
CHECKED BY

DESIGNED BY

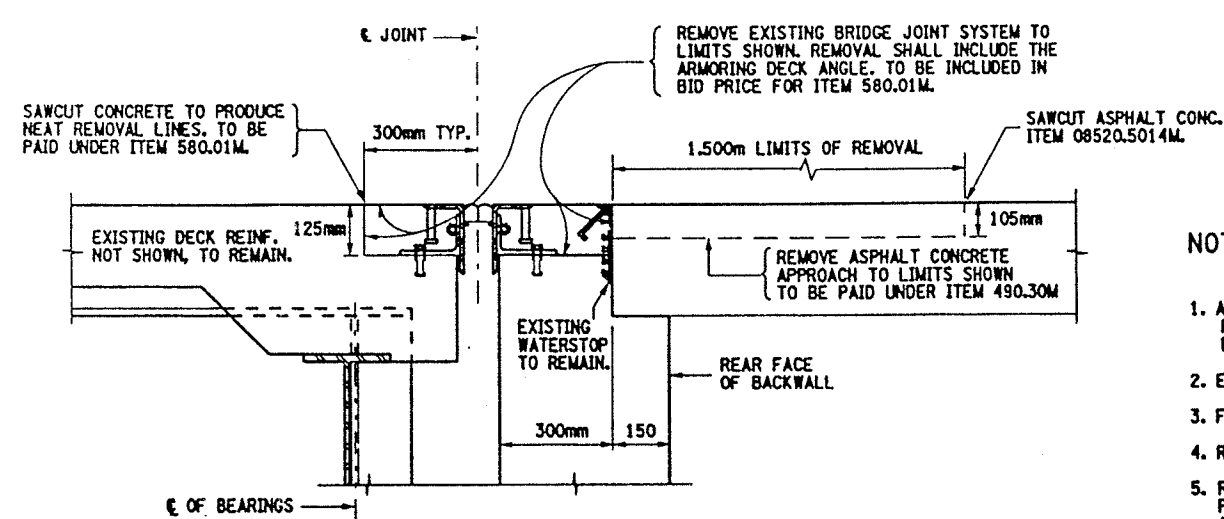
JOB MANAGER

DESIGN SUPERVISOR

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259214	415	432
BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)				
VARIOUS BRIDGES ON INTERSTATE 481				
TOWNS OF DEWITT AND CICERO				
ONONDAGA COUNTY				
P.I.N. 305613		B.I.N. 1093561 & 1093562		



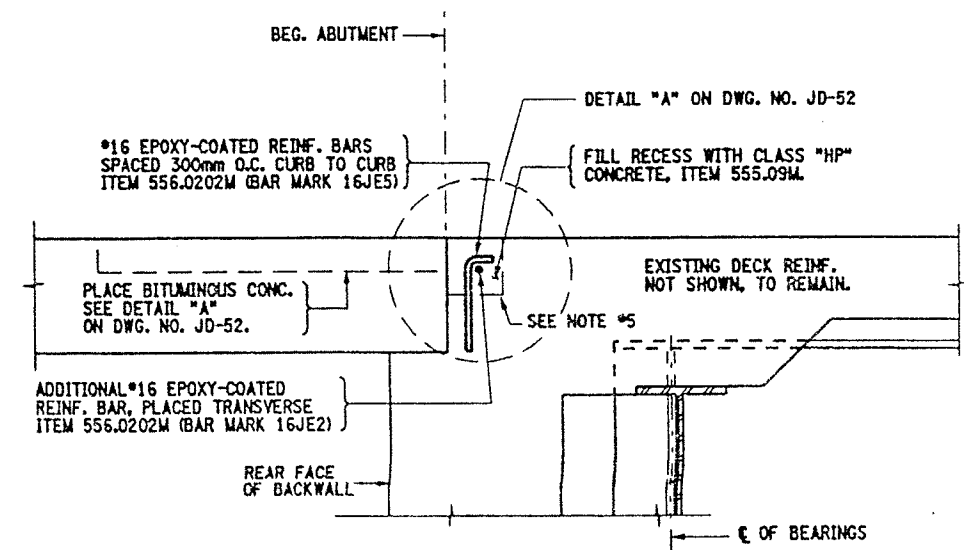
SECTION A-A
EXISTING BEG. ABUTMENT JOINT
BIN 1093561 - SOUTH ABUT.
BIN 1093562 - SOUTH ABUT.
NOT TO SCALE



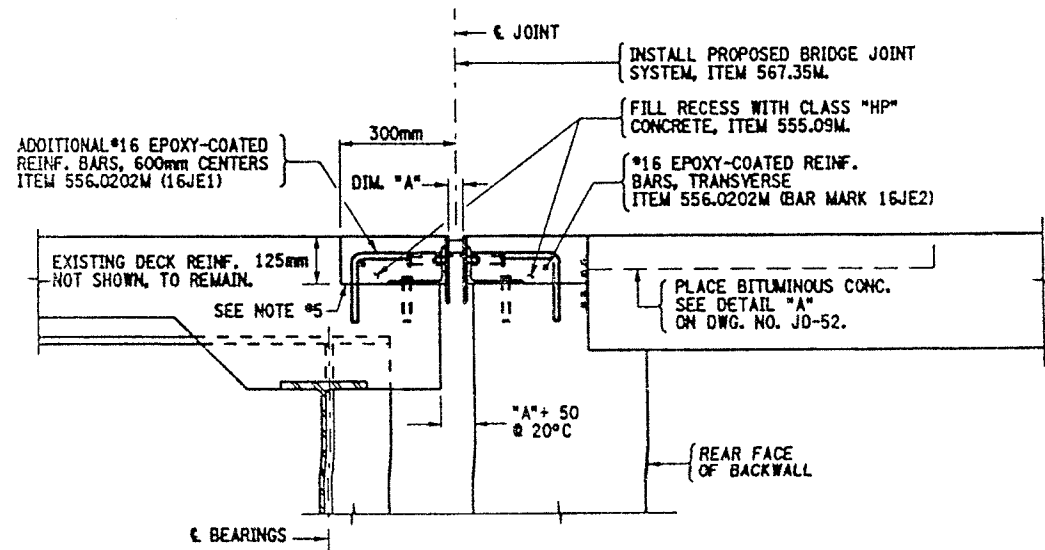
SECTION C-C
EXISTING END ABUTMENT JOINT
BIN 1093561 - NORTH ABUT.
BIN 1093562 - NORTH ABUT.
NOT TO SCALE

NOTES:

1. ACTUAL BRIDGE JOINT BLOCK-OUT DIMENSIONS MAY VARY. REMOVAL LIMITS SHALL BE TO EXISTING BLOCK-OUT LOCATIONS, A08E.
2. EXISTING WATERSTOPS SHALL REMAIN.
3. FOR CALCULATION OF "A" DIMENSION REFER TO DWG. NO. JD-1.
4. REFER TO DWG. NO. JD-50 FOR PROPOSED PARTIAL PLAN VIEWS.
5. RECESSES RECEIVING ITEM 555.09M, AFTER SURFACE PREPARATION, THOROUGHLY WET THE CONCRETE SURFACES AND ALL POROUS SURFACES TO BE IN CONTACT WITH NEW CONCRETE FOR 12 HOURS. NOTE, THE USE OF MATERIAL SPECIF. 705-22 PORTLAND CEMENT MORTAR BONDING GROUT HAS BEEN ELIMINATED, (PROJECT PROPOSAL).
6. ALL NOTES AND DETAILS ON DWG. NO. JD-1 SHALL APPLY.



SECTION B-B
PROPOSED BEG. ABUTMENT JOINT
BIN 1093561 - SOUTH ABUT.
BIN 1093562 - SOUTH ABUT.
NOT TO SCALE



SECTION D-D
PROPOSED END ABUTMENT JOINT
BIN 1093561 - NORTH ABUT.
BIN 1093562 - NORTH ABUT.
NOT TO SCALE

ITEMS USED:

ITEM 490.30M	- MISC. COLD MILLING OF BIT. CONC. (SMD)
ITEM 08520.5014M	- SAWCUTTING BIT. CONC. 040
ITEM 555.09M	- STRUCT. CONCRETE, CLASS "HP" (CND)
ITEM 556.0202M	- EPOXY-COATED BAR REINF. FOR STRUCT. (Kd)
ITEM 567.35M	- MOD. ARMORED JOINT SYSTEM W/COMP. SEAL TYPE A5 00
ITEM 580.01M	- REMOVAL OF STRUCT. CONCRETE (CND)

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED
AS BUILT REVISIONS

SIGNATURE		DATE	
INTERSTATE 481 NB & SB OVER ROUTE 290 BRIDGE JOINT DETAILS			
STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION			
FILENAME 305613AJJA1	REGION 3	DATE 10/02	DRAWING NO. JD-51

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259214	416	432
BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)				
VARIOUS BRIDGES ON INTERSTATE 481				
TOWNS OF DEWITT AND CICERO				
ONONDAGA COUNTY				
P.I.N. 305613		B.I.N. 1093561 & 1093562		

NOTES:

1. ACTUAL BRIDGE JOINT BLOCK-OUT DIMENSIONS MAY VARY. REMOVAL LIMITS SHALL BE TO EXISTING BLOCK-OUT LOCATIONS, AOB.
2. REFER TO DWG. NO. JD-50 FOR PARTIAL PLAN VIEWS.
3. ALL WELDS SHALL BE GROUND SMOOTH TO THE SATISFACTION OF THE ENGINEER, ON SEAL CONTACT SIDE OF EDGE BEAM.
4. THIS DEPTH SHALL BE INDICATED ON THE SHOP DRAWINGS AND SHALL BE SUCH THAT WHEN THE SEAL IS COMPRESSED TO 50% OF ITS NOMINAL WIDTH, THE TOP OF THE SEAL SHALL BE NOT LESS THAN 6 mm NOR MORE THAN 19 mm BELOW THE TOP OF ROADWAY.
5. RECESSES RECEIVING ITEM 555.09M, AFTER SURFACE PREPARATION, THOROUGHLY WET THE CONCRETE SURFACES AND ALL POROUS SURFACES TO BE IN CONTACT WITH NEW CONCRETE FOR 12 HOURS. NOTE, THE USE OF MATERIAL SPECIF. 705-22 PORTLAND CEMENT MORTAR BONDING GROUT HAS BEEN ELIMINATED, (PROJECT PROPOSAL).
6. ALL SURFACES OF HMA SHALL BE CLEANED AND TACK-COATED PRIOR TO HMA PLACEMENT. ALL COSTS SHALL BE INCLUDED WITHIN THE UNIT PRICE BID FOR ITEM 407.01M.
7. ANY USE OF SUPERPAVE HMA ITEMS SHALL INCLUDE THE APPROPRIATE PLANT PRODUCTION QUALITY ADJUSTMENT ITEMS.

ITEMS USED:

ITEM 402.128201M	- SUPERPAVE HMA F2, 12.5mm (QT)
ITEM 402.128211M	- PLANT PRODUCTION QUALITY ADJUSTMENT TO 402.128201M (QD)
ITEM 402.258901M	- SUPERPAVE HMA F9, 25.0mm (QT)
ITEM 402.258911M	- PLANT PRODUCTION QUALITY ADJUSTMENT TO 402.258901M (QD)
ITEM 407.01M	- TACK COAT (Q)
ITEM 556.0202M	- EPOXY-COATED BAR REINF. FOR STRUCT. (Q)
ITEM 555.09M	- STRUCT. CONCRETE, CLASS "HP" (CM)
ITEM 586.01M	- DRILL & GROUT REINF. BARS (mm)

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

SIGNATURE DATE

INTERSTATE 481 NB & SB

OVER

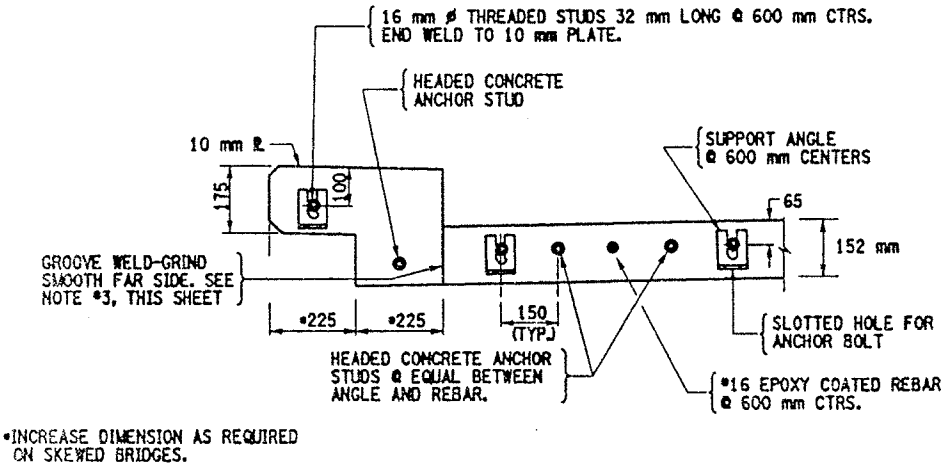
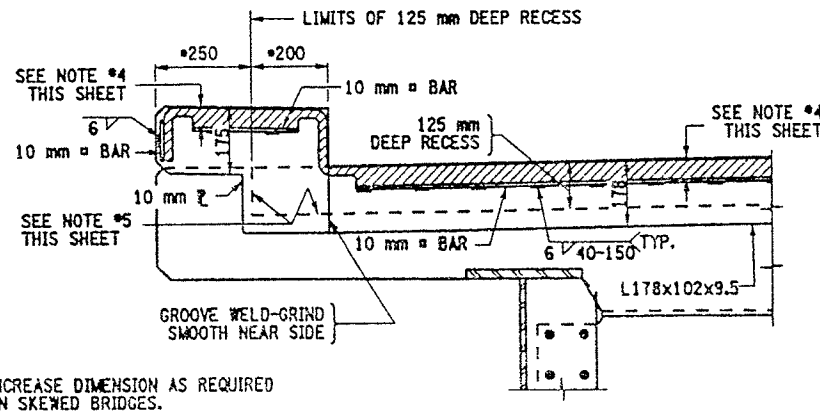
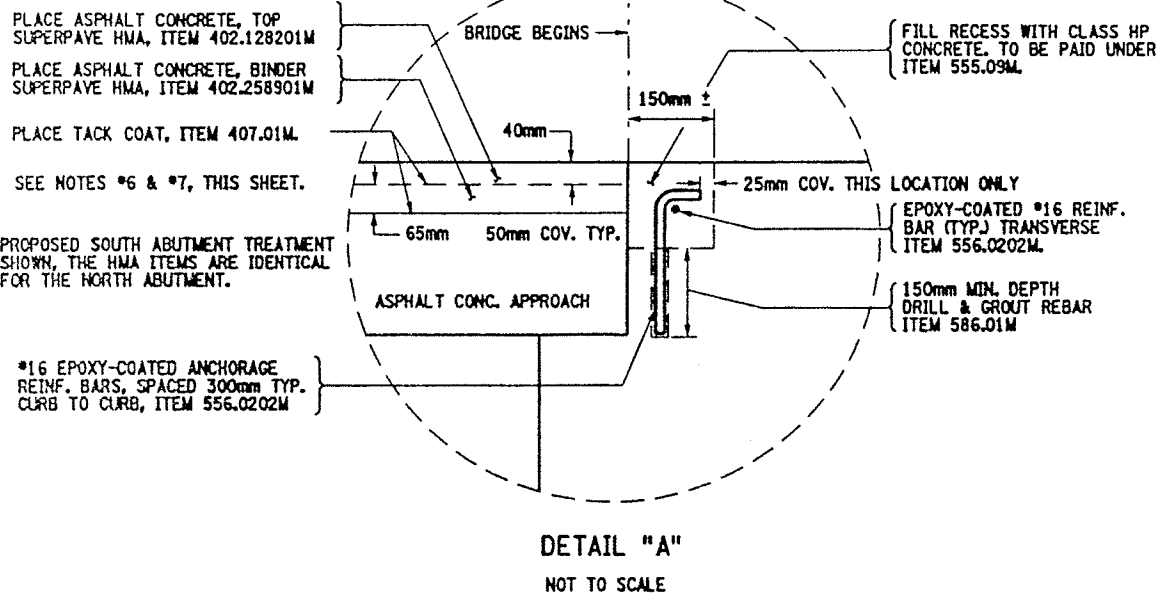
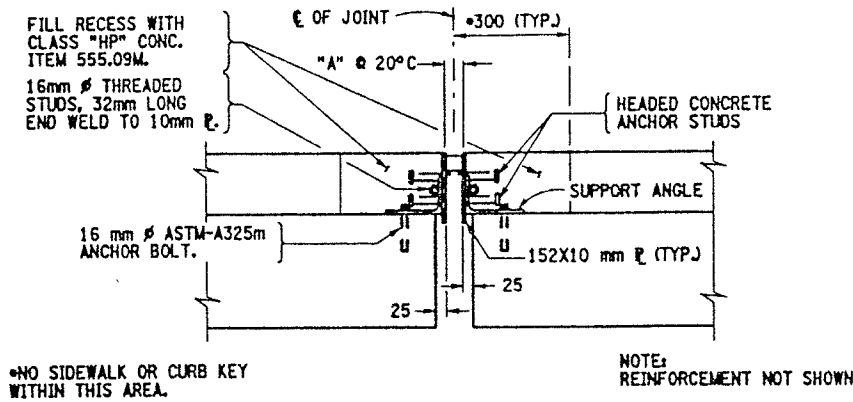
ROUTE 290

BRIDGE JOINT DETAILS

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION



FILENAME	REGION	DATE	DRAWING NO.
305613AJ.JAI	3	10/02	JD-52



CHECKED BY
DRAFTED BY
ESTIMATED BY
CHECKED BY
DESIGNED BY
JOB MANAGER
DESIGN SUPERVISOR

**ATHENICA**

ENVIRONMENTAL SERVICES INC.

Tel (718) 784-7490

Fax (718) 784-4085

**BULK (NOB) ASBESTOS ANALYSIS BY POLARIZED LIGHT MICROSCOPY
AND TRANSMISSION ELECTRON MICROSCOPY**

CLIENT: NYS DOT, Region 3

LABORATORY ID #: 04-04-108

DATES OF ANALYSIS: 04/29/04

PROJECT: Bin # 1093562

ANALYT. METHODOLOGIES: ELAP 198.1, ELAP 198.4

DATE OF REPORT: 04/30/04

LABORATORY RESULTS

CLIENT #	LAB. ID #	LOCATION	%ORG	%ASI	%AII	PLM RESULTS	TYPE OF ASBEST.	TEM RESULTS	TYPE OF ASBEST.	POSIT. / NEGAT.
01	04-04-108-01	Steel paint coat G-5 flange bottom 1 meter from end bearing	24.98	11.92	63.10	ND	NA	ND	NA	Negat.
02	04-04-108-02	Steel paint coat G-3 web end abutment	30.62	8.44	60.94	ND	NA	ND	NA	Negat.
03	04-04-108-03	Steel paint coat G-2 flange bottom 3 meters from end bearing	46.15	1.28	52.56	ND	NA	ND	NA	Negat.

ANALYST

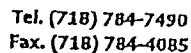
E. Sioukri

LABORATORY DIRECTOR

Spiro Dongaris

LABORATORY CERTIFICATION NUMBERS: NVLAP 101958, ELAP 10955

- Athenica Environmental Services Inc. (AES), is responsible only for information pertaining to samples taken by its employees.
- Samples will be stored for sixty (60) days. AES Inc., should be notified within this time frame for a true duplicate analysis.
- The report relates only to items tested. This report must not be used to claim product endorsement by NVLAP or any other agency of the U.S. Government. Test reports may not be reproduced except in full and with prior approval of AES Inc.
- The liability of Athenica Environmental Services Inc. with respect to the services charged, shall in no event exceed the amount of the invoice.



COMMENTS ATT: CHRISTOPHER ANDERSON
333 E. WASHINGTON ST. SYRACUSE, N.Y. 13202

[illegible]

BATCH #: ~~07~~-04-108

CHAIN OF CUSTODY RECORD			
RELINQUISHED BY:	<i>Kent Way</i>	DATE:	<i>4/16/2004</i>
RECEIVED BY:	<i>M. J. G.</i>	DATE:	<i>4/22/2004</i>
ANALYST:	<i>EJ</i>	DATE:	<i>4/29/2004</i>
LABORATORY ACCREDITATION:		TIME:	<i>13:30</i>
IVLAP# 101958 ELAP# 10955		TIME:	

Asbestos Sampling Survey

Location:

BIN 1-09356-2

Interstate Route 481 North Bound over Route 290

Prepared for:

New York State

Department of Transportation

PIN 3804.09.101

LaBella Project No. 97132

May, 1999

Table of Contents

Page

I. Project Summary 1

II. Site Description..... 1

III. Inspection Procedures 1

IV. Results..... 2

Certification 2

Figures and Table

I. Project Summary

In accordance with conditions of Term Agreement D010010, LaBella Associates, P.C. conducted an asbestos sampling survey of the Interstate Route 481 North Bound bridge over Route 290. Based on laboratory analyses of bulk samples collected, the following material was determined to contain asbestos:

BIN 1-09356-2 Interstate Route 481 North Bound over Route 290

Type of Material	Estimated Amount
Sheet Packing	10.4 Square Meters

II. Site Description

The Site is located in Onondaga County, New York. For the purpose of this report, the Site consists of the Interstate Route 481 North Bound bridge over Route 290 (See attached FIGURE 1 - Site Location Map).

III. Inspection Procedures

The following procedures were used to obtain the data for this Report:

- A. A review of record drawings supplied by Region 3 personnel and a visual inspection of the subject structure were conducted to identify potential visible/accessible sources of asbestos-containing materials. Observations and notes were made to provide a description of the structure, and an estimate of the approximate amount, length, or area of ACM present.
- B. Physical or operational constraints which might affect the removal of the ACM were identified and reported.
- C. Bulk samples of suspected ACM were collected during the site inspection of the subject structure. Samples were taken from each homogeneous area that may contain ACM.
- D. Samples were submitted for analysis. Preliminary PLM analyses of NOB materials were performed by LaBella Laboratories, a NYSDOH approved laboratory, to determine the presence and percentage of asbestos in each sample. TEM analyses of NOB materials, if necessary, were performed by New York Testing Laboratories, Inc.
- E. Lab results were used to determine the approximate location, type, and amount of the verified ACM.
- F. A drawing of the structure at the Site was created, in order to show sample locations and the approximate locations and amounts of confirmed ACM observed in accessible locations.

Only accessible areas were inspected. Inaccessible areas, such as areas within the bridge or the approaches to the bridge were not included in this inspection. No investigation was conducted by LaBella Associates to determine the presence of underground utilities on or in the immediate vicinity of the Site. Actual sample locations are shown in the attached FIGURE 2. Results of bulk sample analyses are tabulated in the attached TABLE.

IV. Results

BIN 1-09356-2 Interstate Route 481 North Bound over Route 290

Sheet Packing

Asbestos-containing sheet packing is located between the tops of the abutments and the deck slab at both ends of the bridge. Most of this material is presently covered by the bridge deck, although the edges of this sheet packing are exposed and visible at various locations.

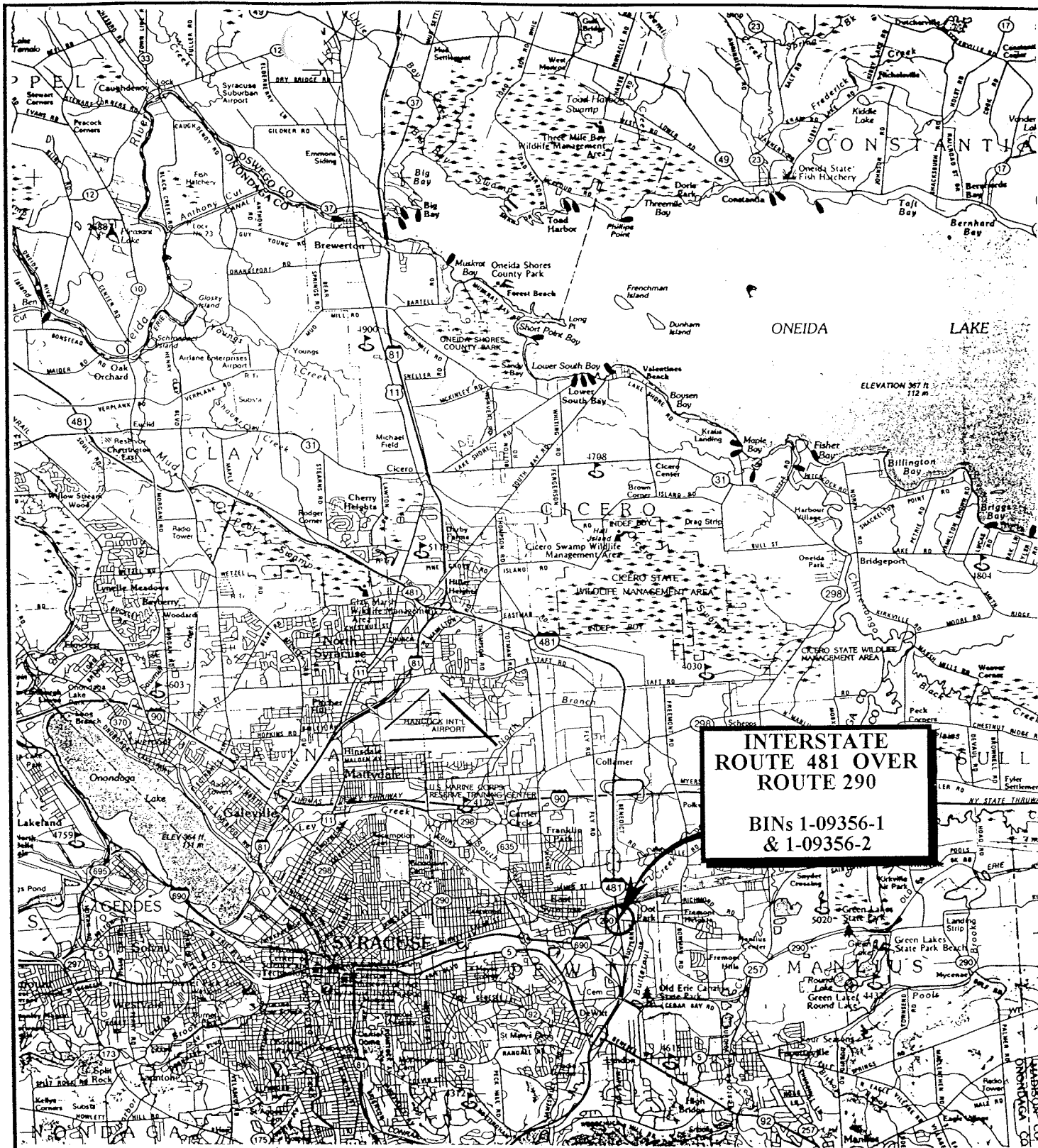
It is estimated that the total amount of this asbestos-containing sheet packing material on the bridge is approximately 10.4 square meters. This estimate is based on field measurements taken at the time of the site visit.

The approximate locations of this asbestos-containing sheet packing are shown in FIGURE 2.

Certification

LaBella Associates, P.C. certifies the accuracy of this report, to the best of our knowledge, based on the information collected as described in the Inspection Procedures Section of this investigation.

Figures & Table

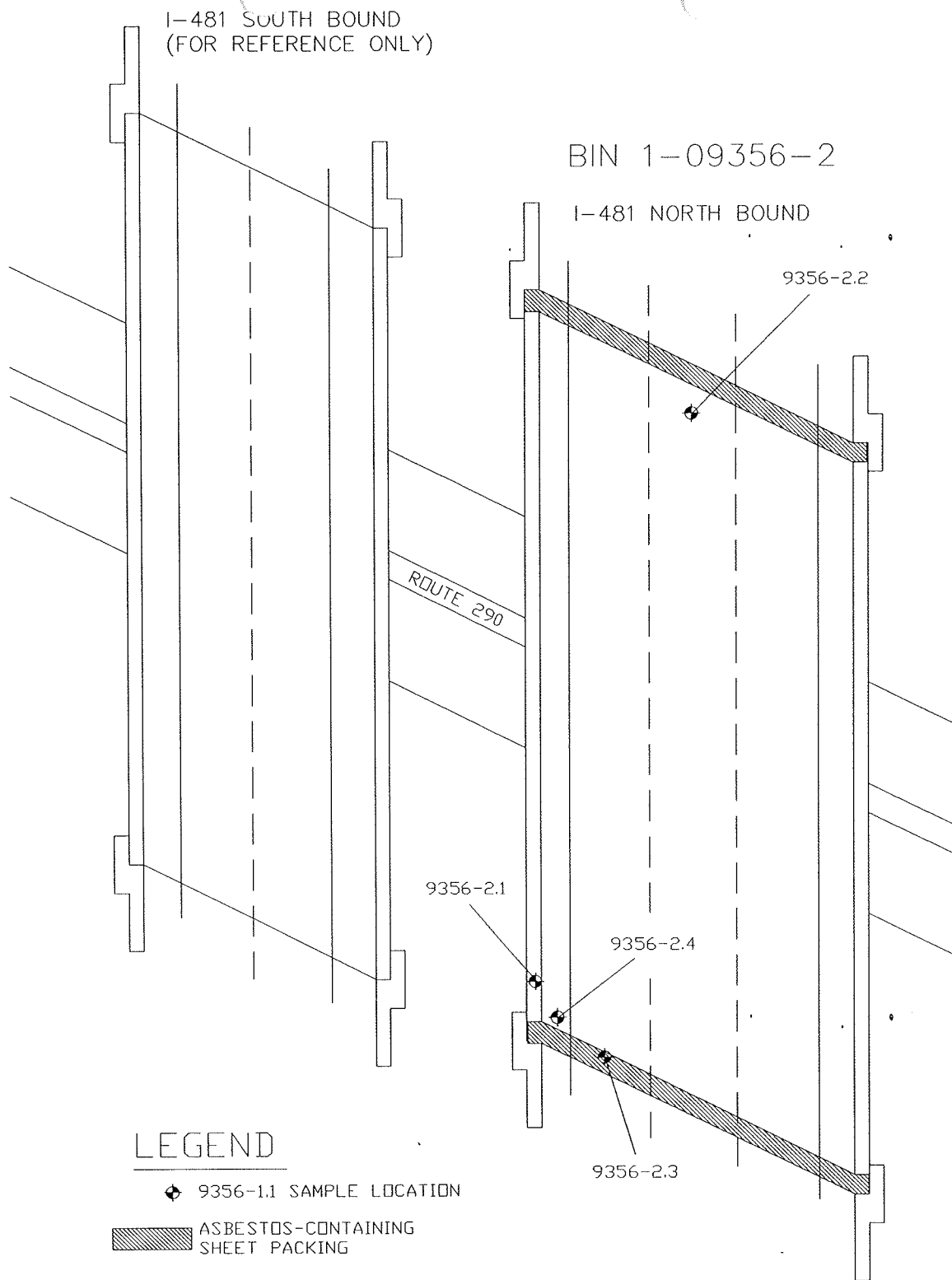


SCALE: 1" = 2000'

FIGURE 1
Site Location Map
Interstate Route 481
over Route 290
East Syracuse, New York

ABELLA

PROJECT NO. 97132



LEGEND

◆ 9356-1.1 SAMPLE LOCATION

▨ ASBESTOS-CONTAINING
SHEET PACKING



PROJECT TITLE: ASBESTOS SAMPLING SURVEY
7 BRIDGES, ONONDAGA &
OSWEGO COUNTIES, NEW YORK

FIGURE 2 : I-481 NORTH BOUND
OVER ROUTE 290
BIN 1-09356-2
SAMPLE LOCATIONS AND CONFIRMED ACM

PROJECT NO. 97132

PIN 3804.09.101

NOT TO SCALE

DATE: MAY, 1999

Bulk Sample Results Table

Asbestos Sampling Survey
BIN 1-09356-2
Interstate Route 481 North Bound over Route 290
Onondaga County, New York
LaBella Project # 97132
PIN 3804.09.101

Sample #	Sample Location	Type of Material	Results % Asbestos	Amount of Material	Specification Item No.
9356-2.1	South End of Bridge, on Outside I-Beam	Green Paint	None Detected	N/A	N/A
9356-2.2	North End of Bridge, on Inside I-Beam	Green Paint	None Detected	N/A	N/A
9356-2.3	West End of Bridge Between Deck & Abutment	Sheet Packing	37% Chrysotile	10.4 Square Meters	15202.0627 (M)
9356-2.4	West End of Bridge on Back Wall	Gray Masonry Coating	None Detected	N/A	N/A

Bridge Rehabilitation

BIN 1031720

South Bay Road over I-81

ASBESTOS & LEAD MASONRY COATING SURVEY REPORT

Location: BIN 1031720
South Bay Road Bridge over I-81
Town of Cicero, Onondaga County, New York
PIN 3806.55.101

Prepared for:
New York State Department of Transportation



Prepared By:



175 Sully's Trail, Suite 202
Corporate Crossings Office Park
Pittsford, New York 14534

December 2014

ASBESTOS & LEAD MASONRY COATING SURVEY REPORT

Location: BIN 1031720
South Bay Road Bridge over I-81
Town of Cicero, Onondaga County, New York
PIN 3806.55.101

TABLE OF CONTENTS

	<u>Page</u>
1.0 Project Summary.....	1
2.0 Site Description	1
3.0 Inspection Procedures	2
4.0 Results	
4.1 Asbestos	3
4.2 Lead Masonry Coating	3
Certification	3

Figures and Tables

Figure 1	Site Location Map
Figure 2	Asbestos and Lead Bulk Sample Location Plan
Table 1	Asbestos Bulk Sample Results
Table 2	Lead Masonry Coating Sample Results

Appendices

Appendix A	Asbestos Survey Fact Sheet
Appendix B	Licenses and Certifications
Appendix C	Laboratory Analysis Reports and Chain of Custody Forms
Appendix D	Previous Survey Reports

1.0 Project Summary

In accordance with conditions of Term Agreement D031070, Lu Engineers conducted an asbestos sampling survey and limited lead based masonry coating inspection on the South Bay Road Bridge over I-81 (BIN 1031720) in the Town of Cicero, Onondaga County, New York. Based on information obtained using the procedures described in Section 3.0 Inspection Procedures, the following summarizes the results of this investigation.

BIN 1031720 – South Bay Road Bridge over I-81

Confirmed Asbestos-Containing Materials (ACMs)

Based on laboratory analyses and previous reports of bulk samples collected, the following material was determined to contain asbestos:

Type of Material	Typical Location	Estimated Amount	Friability	Condition
Masonry Coating	Concrete Backwall, Cheekwall and Abutment Surfaces and Piers	9,950 SF	Non-Friable	Good
Protective Covering for Metal Surfaces	Structural Steel Members Beneath Former Open Grates	2,046 SF	Non-Friable	Good

SF = Square Feet

Inaccessible/Assumed ACMs

No inaccessible/assumed ACMs were identified.

Confirmed Lead Based Masonry Coating

Based on laboratory analyses of bulk samples collected, the masonry coating is not lead containing per EPA's definition of lead based paint.

2.0 Site Description

The site is located in the Town of Cicero, Onondaga County, New York. For the purpose of this report, the site consists of BIN 1031720 – South Bay Road Bridge over I-81. The site is indicated on the attached Figure 1 – Site Location Map.

3.0 Inspection Procedures

The following procedures were used to obtain the data for this Report:

- A. A review of record drawings supplied by Region 3 personnel and a visual inspection of the subject structure were conducted to identify potential visible/accessible sources of asbestos-containing materials. Observations and notes were made to provide a description of the structure, and an estimate of the approximate amount, length, or area of ACM present.
- B. Physical or operational constraints, which might affect the removal of the ACM, were identified and reported.
- C. Bulk samples of suspected ACMs and lead based masonry coating were collected during the site inspection of the subject structure. Samples were taken from each homogeneous area that may contain ACM. Masonry coatings were sampled for lead. The investigation was limited to areas of the bridge that could be accessed from the bridge itself or reached from the ground and/or by use of a ladder from below. The approximate location of bulk samples is indicated on Figure 2, Asbestos and Lead Bulk Sample Location Plan.
- D. Samples were submitted for analysis. Preliminary polarized light microscopy (PLM) analyses of non-friable, organically bound (NOB) materials were performed by Paradigm Environmental laboratories, a NYSDOH approved laboratory, to determine the presence and percentage of asbestos in each sample. Transmission electron microscopy (TEM) analyses of NOB materials, if necessary, were performed by Paradigm Environmental laboratories. Masonry Coating samples were submitted to Paradigm Environmental laboratories and analyzed for total lead content.
- E. Lab results were used to determine the approximate location, type, and amount of the verified ACM and lead.
- F. Asbestos Surveys have been conducted on this bridge previously. The following Report was reviewed as part of this survey and pertinent results were incorporated;
 - Bridge Paint Asbestos Testing prepared by LaBella Associates, dated July 16, 2002.

Only accessible areas were inspected. Inaccessible areas, such as areas within the bridge or the approaches to the bridge were not included in this inspection. No investigation was conducted by Lu Engineers to determine the presence of underground utilities on or in the immediate vicinity of the Site.

4.0 Results

BIN 1031720 – South Bay Road Bridge over I-81

4.1 Confirmed Asbestos-Containing Materials (ACMs)

Masonry Coating

Asbestos-containing masonry coating is located on the concrete backwalls, cheekwalls, bearing supports, piers and abutments of the bridge.

It is estimated that the total amount of this asbestos-containing masonry coating on the bridge is approximately 9,950 square feet. The approximate locations of this asbestos-containing material are shown in Figure 2.

Protective Covering for Metal Surfaces

Asbestos-containing protective covering for metal surfaces (also commonly known as “Dum-Dum” paint) is located on some structural steel members of the bridge. This asbestos-containing paint is located on structural steel members beneath the former open grates at the east and west ends of the bridge.

It is estimated that the total amount of this asbestos-containing protective covering for steel surfaces on the bridge is approximately 2,046 square feet. The approximate locations of this asbestos-containing material are shown in Figure 2.

Inaccessible/Assumed ACMs

No inaccessible/assumed ACMs were identified.

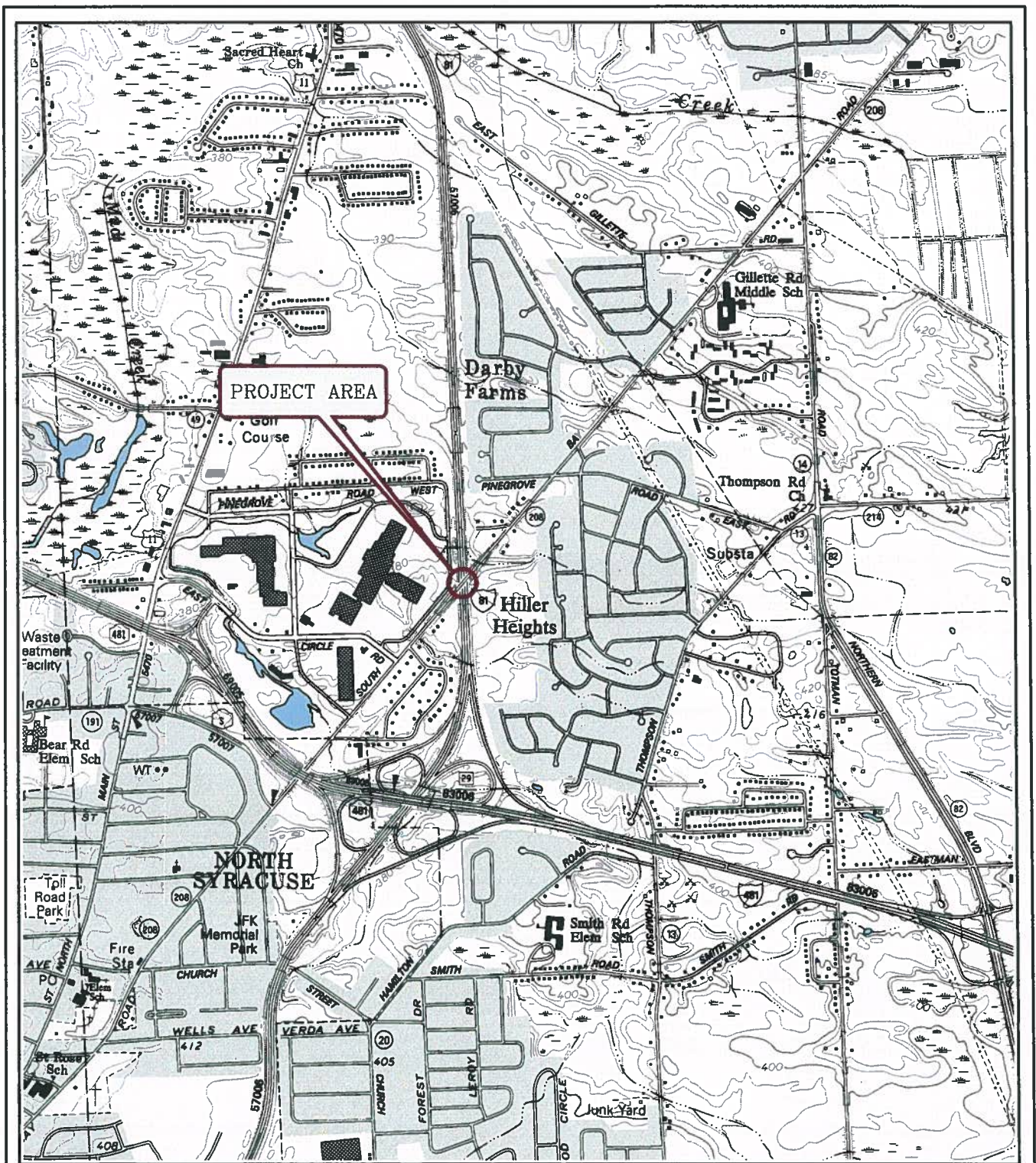
4.2 Confirmed Lead Based Masonry Coating

Based on laboratory analyses of bulk samples collected, the masonry coating is not lead containing per EPA’s definition of lead based paint.

Certification

Lu Engineers certifies the accuracy of this report, to the best of our knowledge, based on the information collected as described in the Inspection Procedures Section of this report.

Figures and Tables



SCALE: 1" = 2000'



FIGURE 1. SITE LOCATION MAP
NEW YORK STATE DEPARTMENT OF TRANSPORTATION
SOUTH BAY ROAD BRIDGE OVER I-81
CICERO | ONONDAGA COUNTY | NEW YORK

PIN 3808.55.101

BIN 1031720

DATE: NOVEMBER 2014

SCALE: 1:2,000

PROJECT NO: 9923-64

MAP SOURCE: NYS DOT RASTER QUADRANGLE;
 BREWERTON AND CICERO, ONONDAGA COUNTY
 DOT EDITION DATE: 1997 / USGS CONTOUR DATE: 1952

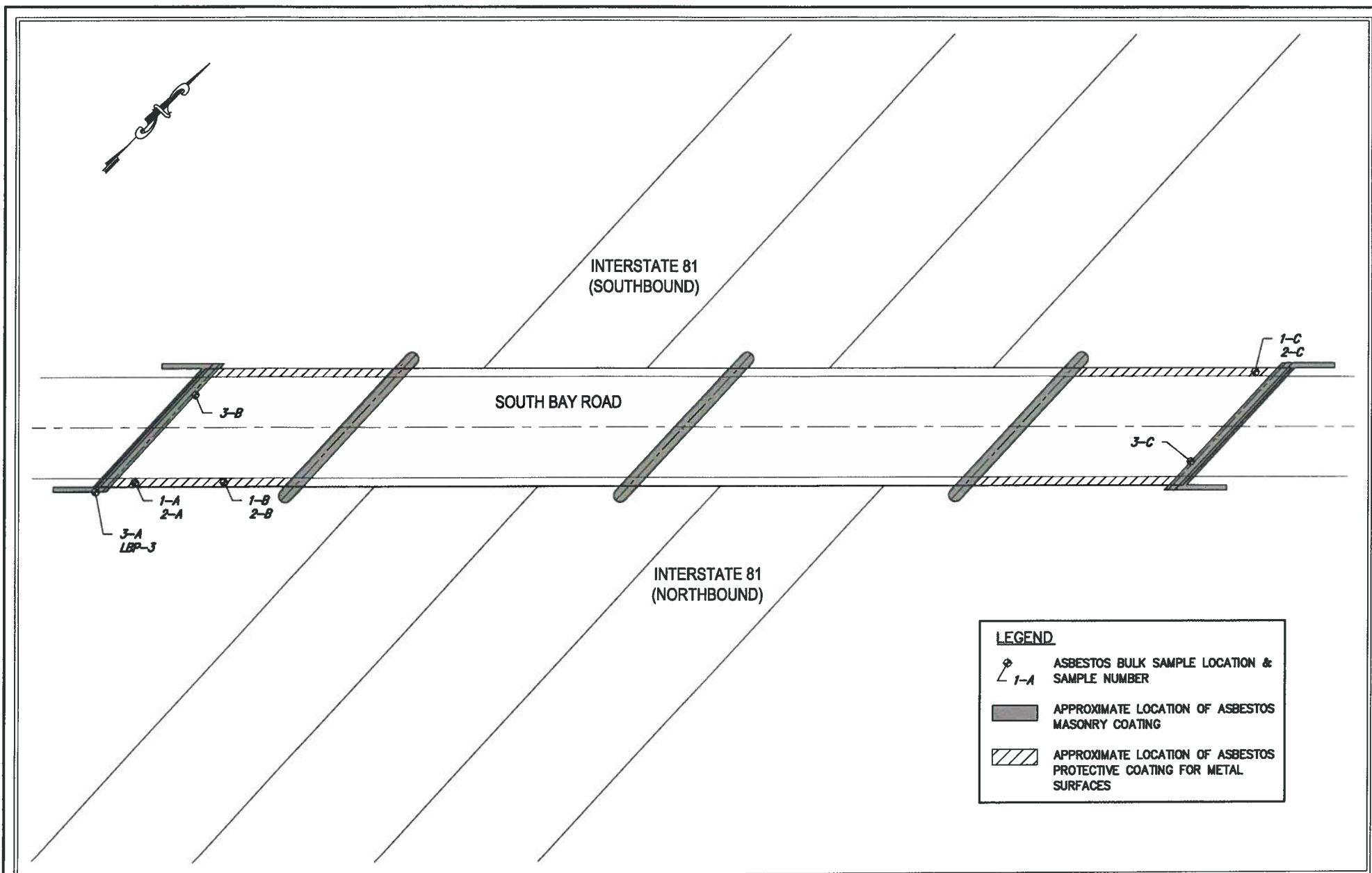


TABLE 1
ASBESTOS BULK SAMPLE RESULTS

SOUTH BAY ROAD BRIDGE OVER I-81
TOWN OF CICERO, ONONDAGA COUNTY, NEW YORK
BIN 1031720

Sample #	Sample Location	Type of Material	Results % Asbestos	Amount of Material	Specification Item
1-A	Southeast Corner of Bridge Under Bridge Railing Base Plate	Tan Cloth Pad	No Asbestos Detected	N.A.	N.A.
1-B	East Side of Bridge Under Bridge Railing Base Plate	Tan Cloth Pad	No Asbestos Detected	N.A.	N.A.
1-C	Northwest Corner of Bridge Under Bridge Railing Base Plate	Tan Cloth Pad	No Asbestos Detected	N.A.	N.A.
2-A	Southeast Corner of Bridge Under Bridge Railing Base Plate	White/Grey Caulk	No Asbestos Detected	N.A.	N.A.
2-B	East Side of Bridge Under Bridge Railing Base Plate	White/Grey Caulk	No Asbestos Detected	N.A.	N.A.
2-C	Northwest Corner of Bridge Under Bridge Railing Base Plate	White/Grey Caulk	No Asbestos Detected	N.A.	N.A.
3-A	Southeast Cheek Wall	Grey Masonry Coating	3.4% Chrysotile	9,950 SF	210.4812XX
3-B	South Back Wall	Grey Masonry Coating	No Asbestos Detected	N.A.	N.A.
3-C	Northeast Abutment	Grey Masonry Coating	7.4% Chrysotile	9,950 SF	210.4812XX

N.A. – Not Applicable

SF – Square Foot

TABLE 2
LEAD MASONRY COATING SAMPLE RESULTS

Sample #	Sample Location	Type of Material	Result (%)
LBP-3	Southeast Cheek Wall	Masonry Coating	0.0886

APPENDIX A

Asbestos Survey Fact Sheet

Asbestos Survey Fact Sheet

Name and Address of Building/Structure:

South Bay Road Bridge over I-81 (BIN 1031720)
Town of Cicero, Onondaga County, New York

Name and Address of Building/Structure Owner:

New York State Department of Transportation
50 Wolf Road
Albany, New York 12232

Name and Address of Owner's Agent:

Lu Engineers
175 Sully's Trail, Suite 202
Pittsford, New York 14534

Name of the Firm & Persons Conducting the Survey:

Lu Engineers
Mitchell C. Smith

Date Survey Was Conducted:

August 6, 2014

List of Homogeneous Areas

(Items in **Bold** Confirmed ACM, *italics* sampled by others)

Tan Cloth Pad under Railing

Black Sheet Packing

White / Gray Caulk

Black Tar

Green Paint (Dum-Dum)

Black Bearing Pad

Grey Masonry Coating

APPENDIX B

License and Certifications

New York State – Department of Labor

Division of Safety and Health
License and Certificate Unit
State Campus, Building 12
Albany, NY 12240

ASBESTOS HANDLING LICENSE

Joseph C. Lu Engineering And Land Surveying, P.C.
Suite 202
175 Sully's Trail
Pittsford, NY 14534

FILE NUMBER: 99-0907
LICENSE NUMBER: 29286
LICENSE CLASS: RESTRICTED
DATE OF ISSUE: 01/23/2014
EXPIRATION DATE: 01/31/2015

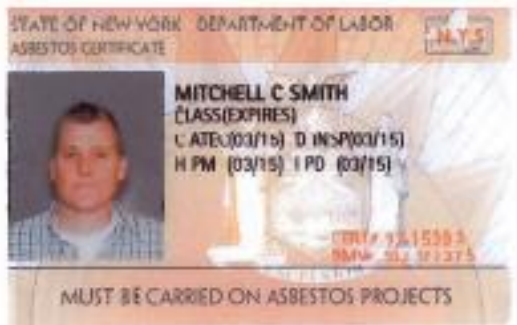
Duly Authorized Representative – Susan Hilton

This license has been issued in accordance with applicable provisions of Article 10 of the Labor Law of New York State and of the New York State Codes, Rules and Regulations (12 NYCRR Part 56). It is subject to suspension or revocation for a (1) serious violation of state, federal or local laws with regard to the conduct of an asbestos project, or (2) demonstrated lack of responsibility in the conduct of any job involving asbestos or asbestos material.

This license is valid only for the contractor named above and this license or a photocopy must be prominently displayed at the asbestos project worksite. This license verifies that all persons employed by the licensee on an asbestos project in New York State have been issued an Asbestos Certificate, appropriate for the type of work they perform, by the New York State Department of Labor.

Eileen M. Franko

Eileen M. Franko, Acting Director
For the Commissioner of Labor



Mitchell C. Smith

C – Air Sampling Technician

D – Inspector

H – Project Monitor

I – Project Designer

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER



Expires 12:01 AM April 01, 2015
Issued April 01, 2014

CERTIFICATE OF APPROVAL FOR LABORATORY SERVICE

Issued in accordance with and pursuant to section 502 Public Health Law of New York State

MR. BRUCE HOOGESTEGER
PARADIGM ENVIRONMENTAL SERVICES INC
179 LAKE AVENUE
ROCHESTER, NY 14608

NY Lab Id No: 10958

is hereby APPROVED as an Environmental Laboratory for the category
ENVIRONMENTAL ANALYSES SOLID AND HAZARDOUS WASTE
All approved subcategories and/or analytes are listed below:

Miscellaneous

Asbestos in Friable Material	Item 198.1 of Manual EPA 600/M4/82/020
Asbestos in Non-Friable Material-PLM	Item 198.6 of Manual (NOB by PLM)
Asbestos in Non-Friable Material-TEM	Item 198.4 of Manual
Lead in Dust Wipes	EPA 6010C
Lead in Paint	EPA 6010C

Sample Preparation Methods

EPA 3050B
APP. 14.2, HUD JUNE 1995

Serial No.: 50447

Property of the New York State Department of Health. Certificates are valid only at the address shown, must be conspicuously posted, and are printed on secure paper. Continued accreditation depends on successful ongoing participation in the Program. Consumers are urged to call (518) 485-5570 to verify the laboratory's accreditation status.

APPENDIX C

Laboratory Analysis Reports and Chain of Custody Forms



PLM & TEM BULK ASBESTOS REPORT

Client: Lu Engineers

Location: NYSDOT - PIN 3806.55.101, BIN 1031720

Job No: 12246-14

Page: 1 of 2

South Bay Road Bridge over I-81 Town of Cicero, Onondaga County, New York

Sample Date: 11/6/2014

Client ID	Lab ID	Sampling Location	Description	PLM Asbestos Fibers Type & Percentage	PLM Total Asbestos	N O B	TEM Asbestos Fibers Type & Percentage	TEM Total Asbestos	PLM Non-Asbestos Fibers Type & Percentage	Non- Fibrous Matrix Material %
1-A	82212	SE Corner of Bridge	Tan Cloth Pad	None Detected	0%		Not Required	N/A	Cellulose 60%	40%
1-B	82213	E. Side of Bridge	Black Cloth Pad	None Detected	0%		Not Required	N/A	Cellulose 60%	40%
1-C	82214	NW Corner of Bridge	Tan Cloth Pad	None Detected	0%		Not Required	N/A	Cellulose 60%	40%
2-A	82215	SE Corner of Bridge	White/Gray Caulk	Inconclusive No Asbestos Detected	0%	#	None Detected	<1.0%	None Detected	100%
2-B	82216	E. Side of Bridge	White/Gray Caulk	Inconclusive No Asbestos Detected	0%	#	None Detected	<1.0%	None Detected	100%
2-C	82217	NW Corner of Bridge	White/Gray Caulk	Inconclusive No Asbestos Detected	0%	#	None Detected	<1.0%	None Detected	100%
3-A	82218	SE Cheek Wall	Gray Fibrous Masonry Coating	Inconclusive No Asbestos Detected	0%	✓	Chrysotile 3.4%	3.4%	Wollastonite 10%	86.6%
3-B	82219	S. Back Wall	Gray Fibrous Masonry Coating	Inconclusive No Asbestos Detected	0%	✓	None Detected	<1.0%	Wollastonite 10%	90%
3-C	82220	NE Abutment	Gray Fibrous Masonry Coating	Inconclusive No Asbestos Detected	0%	✓	Chrysotile 7.4%	7.4%	Wollastonite 10%	82.6%

NVLAP

Lab Code 200530-0
for PLM Analysis

ELAP ID No.: 10958

⚠ This Method does not remove vermiculite and may underestimate the level of asbestos present in a sample containing greater than 10% vermiculite.

PLM Bulk Asbestos Analysis by EPA 600/M4-82-020 per 40 CFR 763 and/or EPA 600/R-93/116 (NVLAP Lab Code 2000530-0), New York State Department of Health, ELAP Method 198.1, 198.4 and 198.6 ("Polarized Light Microscopy and Transmission Electron Microscopy Methods for Identifying and Quantitating Asbestos in Bulk Samples and in Non-Friable Organically Bound Bulk Samples.").

✓ NOB (non-friable organically bound) Classified for Analytical Purposes Only.

denotes material analyzed by ELAP Method 198.4 and 198.6 per NYSDOH.

** Polarized-light microscopy is not consistently reliable in detecting asbestos in floor coverings and similar non-friable organically bound materials. Quantitative transmission electron microscopy is currently the only method that can be used to determine if this material can be considered or treated as non-asbestos containing.

PLM Date Analyzed: 11/14/2014

Microscope: Olympus BH-2 #233173

Analyst: F. Weinman

TEM Date Analyzed: 11/17/2014

TEM Analyst: F. Weinman

Laboratory Results Approved By:
Asbestos Technical Director

Mary Dohr

Paradigm Environmental Services, Inc. is not responsible for the data supplied by an independent inspector. National Institute of Standards and Technology Accreditation requirements mandate that this report must not be reproduced except in full without the approval of the laboratory. This PLM report relates ONLY to the items tested. This report must not be used to claim product endorsement by NVLAP or any agency of the U.S. Government. Quality control data (including 95% confidence limits and laboratory and analysts' and precision) is available upon request.

Bulk Sample Chain of Custody



Lu Engineers
ENVIRONMENTAL • TRANSPORTATION • CIVIL

12476 17
7 of 7 LOC

2823

Project Name: NYSDOT - PIN 3806.55.101		Lu Project # 9923-64	
Site Address: BIN 1031720 South Bay Road Bridge over I-81 Town of Cicero, Onondaga County, New York		Laboratory Name: Paradigm Environmental Services	
Results to: Lu Engineers 175 Sullys Trail, Suite 202 Pittsford, NY 14534	Sample Type <input checked="" type="checkbox"/> NYS ELAP PLM/TEM <input type="checkbox"/> PLM Only <input type="checkbox"/> TEM Only	Laboratory Address: 179 Lake Avenue Rochester, New York	
		Turn Around Time <input type="checkbox"/> Immediate <input type="checkbox"/> 12 HR <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input checked="" type="checkbox"/> 72 HR <input type="checkbox"/> 5 Day	
Email: sue-hilton@luengineers.com , msmith@luengineers.com		Comments: STOP POSITIVE ON DUPLICATE SAMPLES EXCEPT FOR PAINT!!!	

82212
213
214
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220

FIELD ID	SAMPLE LOCATION	MATERIAL	NOTES
1-A	SE CORNER OF BRIDGE	Cloth pad	under base plate (8x12)
1-B	E SIDE OF BRIDGE	"	(x 98 ea)
1-C	NW CORNER OF BRIDGE	"	
2-A	SE CORNER OF BRIDGE	WHITE/GREY CAULK	under base plate (8x12)
2-B	E SIDE OF BRIDGE	"	
2-C	NW CORNER OF BRIDGE	"	
3-A	SE CHEEK WALL	MASONRY COATING	LBP-3
3-B	S. BACK WALL	"	
3-C	NE ABUTMENT	"	

Date Sampled: 11/6/14

Inspector: MITCH SMITH

Relinquished By

Date/Time 11/7/14 7:00

Received By

Date/Time 11-7-14

Em 11/17/14



PARADIGM
ENVIRONMENTAL SERVICES, INC.

Analytical Report For
Lu Engineers, Inc.

For Lab Project ID

145008

Referencing

PIN 3806.55.101 Region 3, 9923.64

Prepared

Monday, November 17, 2014

Any noncompliant QC parameters or other notes impacting data interpretation are flagged or documented on the final report or are noted below.

A handwritten signature in black ink, consisting of a series of loops and a long horizontal stroke extending to the right.

Certifies that this report has been approved by the Technical Director or Designee

179 Lake Avenue • Rochester, NY 14608 • (585) 647-2530 • Fax (585) 647-3311 • ELAP ID# 10958

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Monday, November 17, 2014

Page 1 of 9



PARADIGM

ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 145008

Client: Lu Engineers, Inc.

Project Reference: PIN 3806.55.101 Region 3, 9923.64

Sample Identifier: BIN 1031720/LBP-3 Masonry Paint

Lab Sample ID: 145008-01

Date Sampled: 11/6/2014

Matrix: Paint

Date Received: 11/13/2014

Lead

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Qualifier</u>	<u>Date Analyzed</u>
Lead	0.0886	%		11/14/2014 18:46

Method Reference(s): EPA 6010C

EPA 3050

Preparation Date: 11/14/2014

Data File: 111414b



Analytical Report Appendix

The reported results relate only to the samples as they have been received by the laboratory.

Each page of this document is part of a multipage report. This document may not be reproduced except in its entirety, without the prior consent of Paradigm Environmental Services, Inc.

All soil/sludge samples have been reported on a dry weight basis, unless qualified "reported as received". Other solids are reported as received.

Low level Volatiles blank reports for soil/solid matrix are based on a nominal 5 gram weight. Sample results and reporting limits are based on actual weight, which may be more or less than 5 grams.

The Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt. Sample condition requirements are defined under the 2003 NELAC Standard, sections 5.5.8.3.1 and 5.5.8.3.2.

NYSDOH ELAP does not certify for all parameters. Paradigm Environmental Services or the indicated subcontracted laboratory does hold certification for all analytes where certification is offered by ELAP unless otherwise specified. Aliquots separated for certain tests, such as TCLP, are indicated on the Chain of Custody and final reports with an "A" suffix.

Data qualifiers are used, when necessary, to provide additional information about the data. This information may be communicated as a flag or as text at the bottom of the report. Please refer to the following list of analyte-specific, frequently used data flags and their meaning:

"<" = Analyzed for but not detected at or above the quantitation limit.

"E" = Result has been estimated, calibration limit exceeded.

"Z" = See case narrative.

"D" = Sample, Laboratory Control Sample, or Matrix Spike Duplicate results above Relative Percent Difference limit.

"M" = Matrix spike recoveries outside QC limits. Matrix bias indicated.

"B" = Method blank contained trace levels of analyte. Refer to included method blank report.

"J" = Result estimated between the quantitation limit and half the quantitation limit.

"L" = Laboratory Control Sample recovery outside accepted QC limits.

"P" = Concentration differs by more than 40% between the primary and secondary analytical columns.

"NC" = Not calculable. Applicable to RPD if sample or duplicate result is non-detect or estimated (see primary report for data flags). Applicable to MS if sample is greater or equal to ten times the spike added. Applicable to sample surrogates or MS if sample dilution is 10x or higher.

"" = Indicates any recoveries outside associated acceptance windows. Surrogate outliers in samples are presumed matrix effects. LCS demonstrates method compliance unless otherwise noted.*

"(1)" = Indicates data from primary column used for QC calculation.

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

GENERAL TERMS AND CONDITIONS

LABORATORY SERVICES

These Terms and Conditions embody the whole agreement of the parties in the absence of a signed and executed contract between the Laboratory (LAB) and Client. They shall supersede all previous communications, representations, or agreements, either verbal or written, between the parties. The LAB specifically rejects all additional, inconsistent, or conflicting terms, whether printed or otherwise set forth in any purchase order or other communication from the Client to the LAB. The invalidity or unenforceability in whole or in part of any provision, term or condition hereof shall not affect in any way the validity or enforceability of the remainder of the Terms and Conditions. No waiver by LAB of any provision, term, or condition hereof or of any breach by or obligation of the Client hereunder shall constitute a waiver of such provision, term, or condition on any other occasion or a waiver of any other breach by or obligation of the Client. This agreement shall be administered and interpreted under the laws of the state which services are procured.

Warranty.	Recognizing that the nature of many samples is unknown and that some may contain potentially hazardous components, LAB warrants only that it will perform testing services, obtain findings, and prepare reports in accordance with generally accepted analytical laboratory principles and practices at the time of performance of services. LAB makes no other warranty, express or implied.
Scope and Compensation.	<p>LAB agrees to perform the services described in the chain of custody to which these terms and conditions are attached. Unless the parties agree in writing to the contrary, the duties of LAB shall not be construed to exceed the services specifically described. LAB will use LAB default method for all tests unless specified otherwise on the Work Order.</p> <p>Payment terms are net 30 days from the date of invoice. All overdue payments are subject to an interest charge of one and one-half percent (1-1/2%) per month or a portion thereof. Client shall also be responsible for costs of collection, including payment of reasonable attorney fees if such expense is incurred. The prices, unless stated, do not include any sale, use or other taxes. Such taxes will be added to invoice prices when required.</p>
Prices.	Compensation for services performed will be based on the current Lab Analytical Fee Schedule or on quotations agreed to in writing by the parties. Turnaround time based charges are determined from the time of resolution of all work order questions. Testimony, court appearances or data compilation for legal action will be charged separately.
Limitations of Liability.	<p>In the event of any error, omission, or other professional negligence, the sole and exclusive responsibility of LAB shall be to re-perform the deficient work at its own expense and LAB shall have no other liability whatsoever. All claims shall be deemed waived unless made in writing and received by LAB within ninety (90) days following completion of services.</p> <p>LAB shall have no liability, obligation, or responsibility of any kind for losses, costs, expenses, or other damages (including but not limited to any special, direct, incidental or consequential damages) with respect to LAB's services or results.</p> <p>All results provided by LAB are strictly for the use of its clients and LAB is in no way responsible for the use of such results by clients or third parties. All reports should be considered in their entirety, and LAB is not responsible for the separation, detachment, or other use of any portion of these reports. Client may not assign the lab report without the written consent of the LAB.</p> <p>Client covenants and agrees, at its/his/her sole expense, to indemnify, protect, defend, and save harmless the LAB from and against any and all damages, losses, liabilities, obligations, penalties, claims, litigation, demands, defenses, judgments, suits, actions, proceedings, costs, disbursements and/or expenses (including, without limitation attorneys' and experts' fees and disbursements) of any kind whatsoever which may at any time be imposed upon, incurred by or asserted or awarded against client relating to, resulting from or arising out of (a) the breach of this agreement by this client, (b) the negligence of the client in handling, delivering or disclosing any hazardous substance, (c) the violation of the Client of any applicable law, (d) non-compliance by the Client with any environmental permit or (e) a material misrepresentation in disclosing the materials to be tested.</p>
Hazard Disclosure.	Client represents and warrants that any sample delivered to LAB will be preceded or accompanied by complete written disclosure of the presence of any hazardous substances known or suspected by Client. Client further warrants that any sample containing any hazardous substance that is to be delivered to LAB will be packaged, labeled, transported, and delivered properly and in accordance with applicable laws.
Sample Handling.	<p>Prior to LAB's acceptance of any sample (or after any revocation of acceptance), the entire risk of loss or of damage to such sample remains with Client. Samples are accepted when receipt is acknowledged on chain of custody documentation. In no event will LAB have any responsibility for the action or inaction of any carrier shipping or delivering any sample to or from LAB premises.</p> <p>Client authorizes LAB to proceed with the analysis of samples as received by the laboratory, recognizing that any samples not in compliance with all current DOH-ELAP-NELAP requirements for containers, preservation or holding time will be noted as such on the final report.</p> <p>Disposal of hazardous waste samples is the responsibility of the Client. If the Client does not wish such samples returned, LAB may add storage and disposal fees to the final invoice. Maximum storage time for samples is 30 days after completion of analysis unless modified by applicable state or federal laws. Client will be required to give the LAB written instructions concerning disposal of these samples.</p> <p>LAB reserves the absolute right, exercisable at any time, to refuse to receive delivery of, refuse to accept, or revoke acceptance of any sample, which, in the sole judgment of LAB (a) is of unsuitable volume, (b) may be or become unsuitable for or may pose a risk in handling, transport, or processing for any health, safety, environmental or other reason whether or not due to the presence in the sample of any hazardous substance, and whether or not such presence has been disclosed to LAB by Client or (c) if the condition or sample date make the sample unsuitable for analysis.</p>
Legal Responsibility.	LAB is solely responsible for performance of this contract, and no affiliated company, director, officer, employee, or agent shall have any legal responsibility hereunder, whether in contract or tort including negligence.
Assignment.	LAB may assign its performance obligations under this contract to other parties, as it deems necessary. LAB shall disclose to Client any assignee (subcontractor) by ELAP ID # on the submitted final report.
Force Majeure.	LAB shall have no responsibility or liability to the Client for any failure or delay in performance by LAB, which results in whole or in part from any cause or circumstance beyond the reasonable control of LAB. Such causes and circumstances shall include, but not limited to, acts of God, acts or orders of any government authority, strikes or other labor disputes, natural disasters, accidents, wars, civil disturbances, difficulties or delays in transportation, mail or delivery services, inability to obtain sufficient services or supplies from LAB's usual suppliers, or any other cause beyond LAB's reasonable control.
Law.	This contract shall be continued under the laws of the State of New York without regard to its conflicts of laws provision.

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

10/2

PARADIGM

CHAIN OF CUSTODY

Page 8 of 9

REPORT TO:				INVOICE TO:				LAB PROJECT #:		CLIENT PROJECT #:	
COMPANY: <u>LU EDWARDS</u>				COMPANY: <u>Same</u>				LAB PROJECT #: <u>145008</u>		CLIENT PROJECT #: <u>9973-64</u>	
ADDRESS: <u>175 Sullivan Trail</u>				ADDRESS:				TURNAROUND TIME: (WORKING DAYS)			
CITY: <u>Pittsford</u> STATE: <u>NY</u> ZIP: <u>14734</u>				CITY: STATE: ZIP:							
PHONE: FAX:				PHONE: FAX:							
ATTN: <u>MITCH SMITH</u>				ATTN:				<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 5		<input type="checkbox"/> OTHER	
PROJECT NAME/SITE NAME: <u>PID 3806-SS-101</u>				COMMENTS: <u>MSMITH@LUEDWARDS.COM</u>				Quotation #			
Version <u>3</u>				REQUESTED ANALYSIS							

DATE	TIME	COMPOSITE	GRAB	SAMPLE LOCATION/FIELD ID	MATRIX	CONTAINER	Total Lead											REMARKS	PARADIGM LAB SAMPLE NUMBER		
* 1 11/6/14			X	BID 1031770 / LBP-3	P	1	X											Masonry Paint			01
2 11/6/14			X	BID 1021962 / LBP-1	P	1	X											"			02
3 11/6/14			X	BID 1021961 / LBP-1	P	1	X											"			03
4 11/6/14			X	BID 1031640 / LBP-2	P	1	X											"			04
5																					
6																					
7																					
8																					
9																					
10																					

Sample Condition: Per NELAC/ELAP 210/241/242/243/244

Receipt Parameter	NELAC Compliance	
Container Type:	Y <input type="checkbox"/>	N <input type="checkbox"/>
Comments:		
Preservation:	Y <input type="checkbox"/>	N <input type="checkbox"/>
Comments:		
Holding Time:	Y <input type="checkbox"/>	N <input type="checkbox"/>
Comments:		
Temperature:	Y <input type="checkbox"/>	N <input type="checkbox"/>
Comments:		

Sampled By: <u>MITCHELL C. SMITH</u>	Date/Time: <u>11/6/2014</u>	Total Cost: <input type="text"/>
Relinquished By: <u>[Signature]</u>	Date/Time: <u>11/10/2014 11/13/14 @ 1500</u>	
Received By: <u>[Signature]</u>	Date/Time: <u>11/13/14 1709</u>	P.I.F. <input type="checkbox"/>
Received @ Lab By:	Date/Time:	

* PARADIGM LAB HAS SAMPLE LBP-3.



Chain of Custody Supplement

Client: La

Completed by: Hyle Swartz

Lab Project ID: 145008

Date: 11/13/14

Sample Condition Requirements

Per NELAC/ELAP 210/241/242/243/244

NELAC compliance with the sample condition requirements upon receipt			
Condition	Yes	No	N/A
Container Type	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments			
Transferred to method-compliant container	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Headspace (<1 mL)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Comments			
Preservation	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Comments			
Chlorine Absent (<0.10 ppm per test strip)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Comments			
Holding Time	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments			
Temperature	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Comments			
Sufficient Sample Quantity	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments			

APPENDIX D

Previous Survey Reports

**BIN 1031720
SOUTH BAY ROAD
OVER ROUTE I-81**

**BRIDGE PAINT ASBESTOS TESTING
BULK SAMPLE SUMMARY TABLE**

NO OTHER SUSPECT MATERIALS TESTED

SAMPLE #	SAMPLE DATE	HOMOGENEOUS AREA	SAMPLE LOCATION	RESULTS- % ASBESTOS *	ANALYSIS METHOD
1031720-1	7/16/02	Green Paint	West End of Bridge on Inside of North Fascia Girder	None Detected	TEM **
1031720-2	7/16/02	Green Paint	West End of Bridge on Center Girder	None Detected	TEM **
1031720-3	7/16/02	Green Paint	East End of Bridge on Cross Girder	None Detected	TEM **
1031720-4	7/16/02	Green Paint	East End of Bridge on Inside of North Fascia Girder Under Former Open Grate	14% Chrysotile	PLM **

* PLM = Polarized Light Microscopy

** TEM = Transmission Electron Microscopy

LaBella Project No. 201001
PIN 3804.79.101
1031720